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PRACTIPEDICS

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ELEMENTARY HOME STUDY COURSE

PRACTIPEDECS

THE SCIENCE OF GIVING FOOT
COMFORT AND CORRECTING
THE CAUSE OF FOOT AND
SHOE TROUBLES

Based on the Experience, Inventions and Methods of
DR. WILLIAM M. SCHOLL

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LONDON

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PRACTIPEDECS

(*Prakti-pe-diks*)

THE SCIENCE OF GIVING FOOT COMFORT BY REMOVING THE CAUSE OF FOOT TROUBLES AND MECHANICALLY CORRECTING PEDIC DEFORMITY

THIS study is based on the broad principle and idea of a definite, studied-out means of relieving foot ills without encroaching upon or interfering with the rights and practice of the physician, surgeon or chiropodist.

The designation of Practipedics covers a science based principally on mechanics and mechanical therapeutics as applied to the feet, although alleviation and prophylactic measures play an important part. The day is not distant when the Practipedist will win the professional status and recognition due to an expert in this specialized branch of therapeutic mechanics.

The prevalent troubles of the feet to-day need the accessory aid of Practipedics together with the co-operation of physicians, surgeons and chiropodists, who will be only too glad to send their patients to a man educated and qualified by the study of this course of Practipedics.

It is essentially prepared for instructing shoe retailers and their salesmen in the art of handling the feet, giving them a practical knowledge of anatomy, physiology and the normal use of the feet, with a complete and practical survey of foot troubles and their correction by the methods used in the wide and successful practice of Dr. William M. Scholl, foremost authority on the mechanical treatment of deformities of the foot.

The study, when mastered, will mean added power

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to anyone who has to do with the feet. The principal opening for the qualified Practipedist is in the boot shop. Every foot-fitter—every shoe fitter—can qualify by carefully studying this course.

In beginning with the study of Lesson No. 1, it should be borne in mind that the author has endeavoured to simplify the study by treating the subject in an elementary manner, and if the outline and suggestions are carefully followed there will be no difficulty in completing the course with high honours.

Those who complete the course and pass the examination will be awarded a diploma or certificate, which will vouch for their ability to treat minor foot ailments in a practical and efficient manner.

Each and every student enrolled is in duty bound to do his best; to concentrate his efforts; and honestly to pursue his studies until the course is completed.

The simplest way to proceed with the study is by commencing with Lesson No. 1, thoroughly mastering it, and being able to answer the review questions before proceeding with Lesson No. 2. Then complete Lesson No. 2 before studying Lesson No. 3. Then when the entire five lessons have been studied and you are ready to answer the examination questions, notify this School, and a set of examination questions will be sent to you. This set of examination questions will then be corrected and graded, and you will be advised whether your grade is high enough to entitle you to the diploma. Should it not be sufficiently high you can study further and then take a new examination. Do not send in answers to review questions.

Students are invited to write to the instructor of the School on any point not clear, but 3d. postage should be enclosed with their letter.

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LESSON No. 1

ANATOMY

To the Student : Anatomy is a very important branch of the study of Practipedics. It is very essential that you thoroughly understand the human foot and the various parts that go to make it such an important and useful member. Please read carefully, and refer to the easily understood illustrations. If there are words you do not understand the significance of, you should obtain a copy of the "Dictionary of the Feet," so as to be able properly to pronounce the words and understand their meaning.

LESSON No. 1

ANATOMY OF THE FOOT

THE foot is composed of bones, muscles, ligaments, tendons, nerves, arteries, veins, fat, tissue substance, skin and nails.

BONES

The skeleton or framework of the human foot consists of twenty-six bones arranged so as to permit considerable movements at the various joints.

The bones act as a framework or support to the fleshy part. The study of the bones is very important, particularly for the Practipedist, inasmuch as nearly all foot troubles, such as are treated by the Practipedist, result from some abnormal positioning or displacement of the various bones.

Another reason why the bones or framework should be carefully studied is that they serve the purpose of enabling one to easily recognize the cause of the ailment, because in Practipedics, by correcting the cause, relief is given.

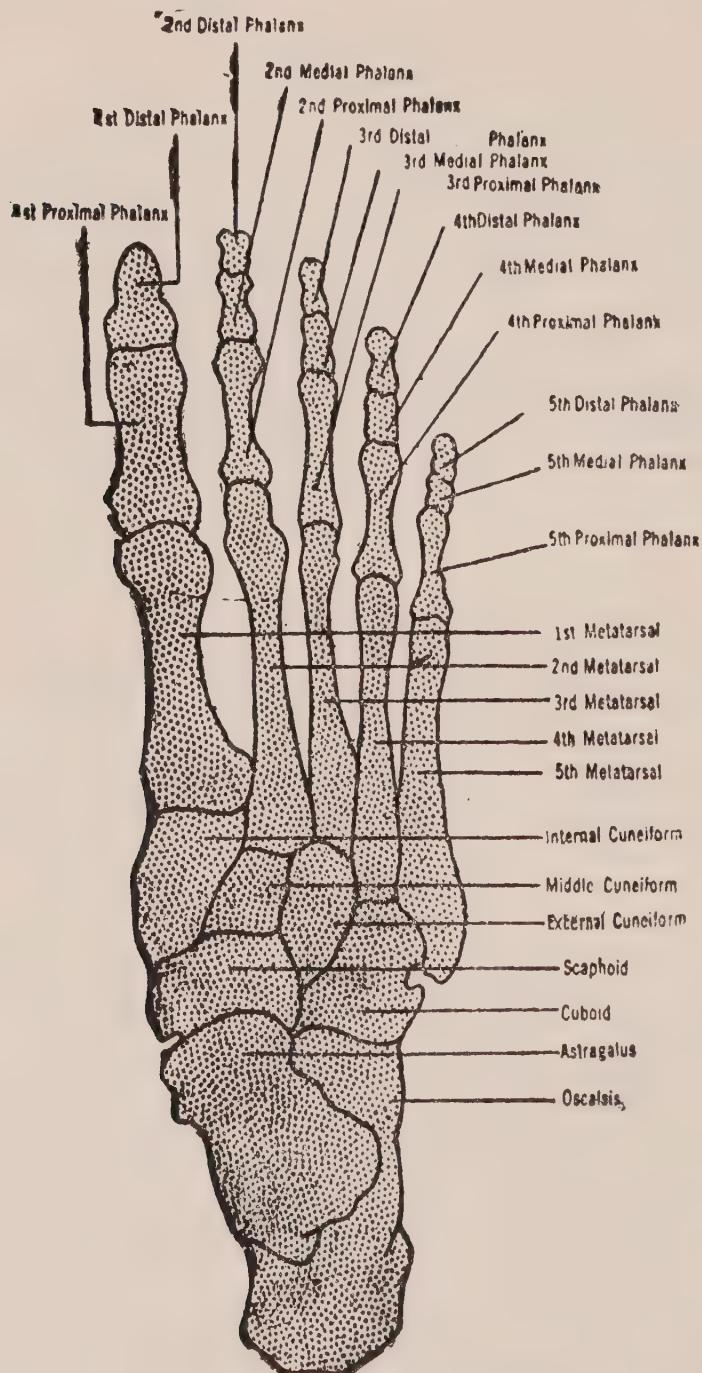


FIG. 1.—Bones of the foot—top view

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The bones of the foot are irregular in shape, and vary in size from the largest bone, which is the Os Calcis, measuring two and one-half inches long, to the smallest,

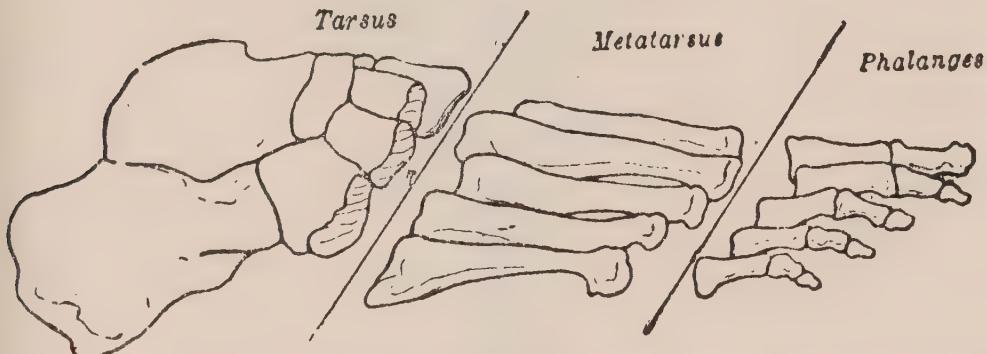


FIG. 2.—Bones of the foot divided into three groups—Tarsus, Metatarsus and Phalanges.

the middle Cuneiform bone, which is three-quarters of an inch long.

The foot may be divided into three sections, known as the Tarsus, Metatarsus and Phalanges.

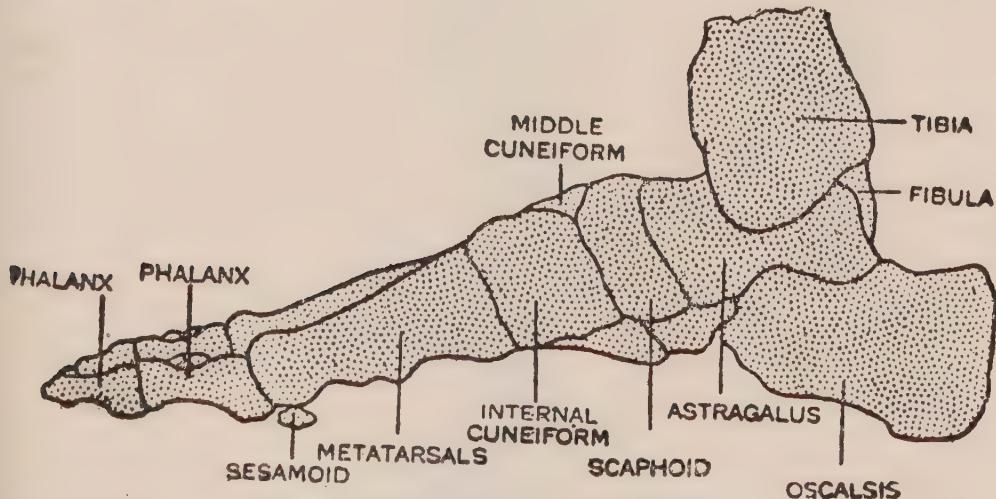


FIG. 3.—Bones of the foot—inside view.

The Tarsus group of bones consists of the Os Calcis, Astragalus, Scaphoid, internal Cuneiform, middle Cuneiform, external Cuneiform and Cuboid, or a total of seven bones.

The Metatarsus consists of the five metatarsal bones,

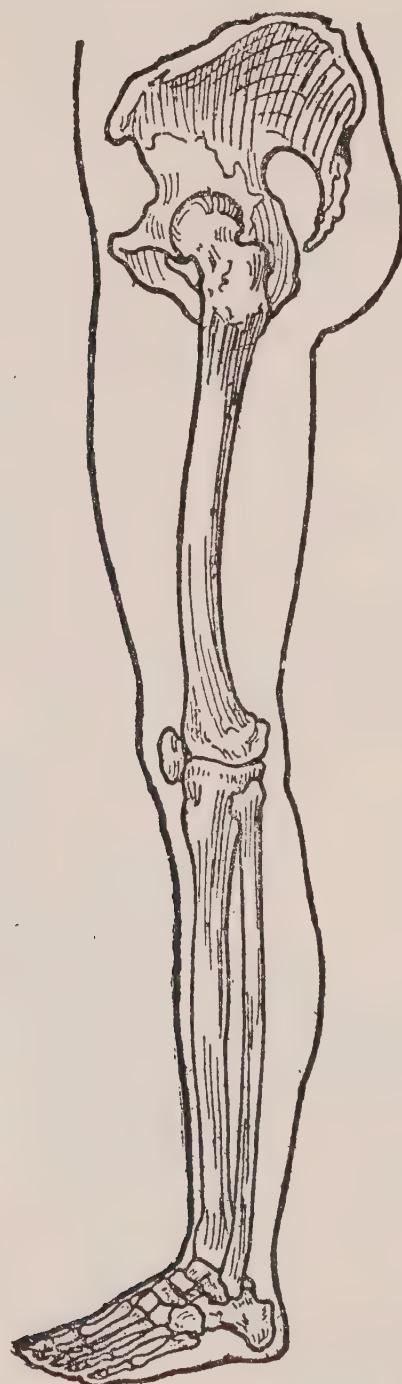


FIG. 4.—Showing bones of the thigh, femur, and bones of the leg, tibia, fibula and patella, or knee-cap. This also shows how the weight is carried down into the foot.

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Nos. 1, 2, 3, 4 and 5. No. 1 begins at the inside or great-toe side of the foot.

The Phalanges, or the bones of the toes, consist of

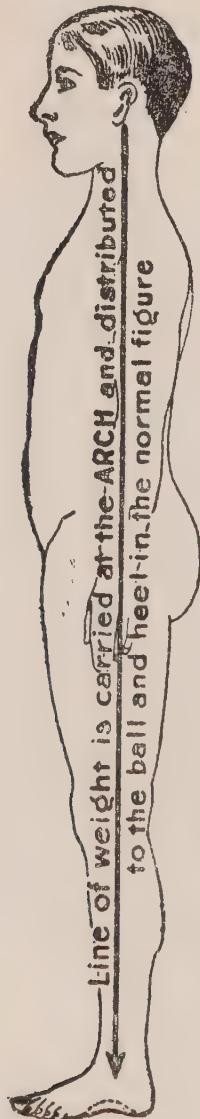


FIG. 5.—To the student: This illustration shows how the entire weight of the body is carried into the foot and is suspended by the high point of the arch.

fourteen bones. There are three bones in each toe except the great toe, which has but two.

(*Students should refer to illustration Fig. 1, showing top view of the skeleton of foot with the respective name of each*

bone. Also illustration showing division of the bones of the foot.)

The largest bone in the foot is the Os Calcis, or Heel Bone. It is to this bone that the big Tendo-Achillis is attached, which acts as a lift or lever in walking.

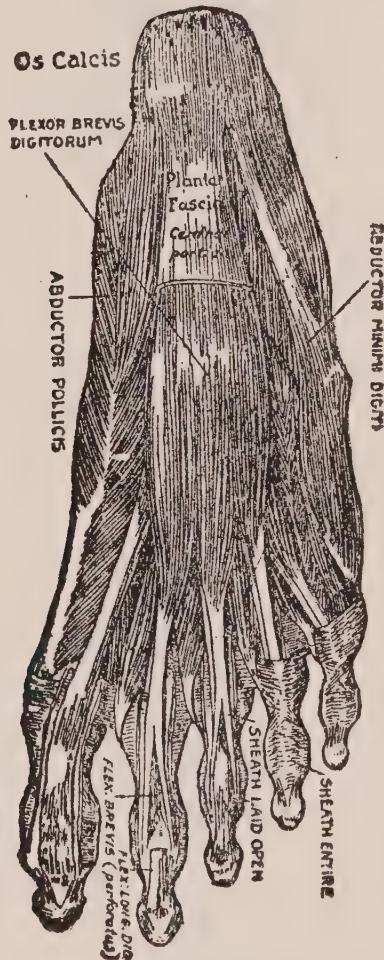


FIG. 6.—This shows first layer of muscles on sole of the foot. These muscles are attached to the Os Calcis and their tendons branch out toward the toes, where they are inserted. There are four layers of muscle on the sole.

There is a reason for there being so many bones in the foot. It is to give numerous joints or articulations which permit various movements, and in that way supply flexibility in walking, running or jumping. These numerous joints also have a tendency to break

the jar of sudden impact, which, if the foot were one or two solid bones, might cause a fracture. Because of these twenty-six bones and numerous joints it is, however, very easy for bone displacements to take place.

MUSCLES

Muscles supply the motive power, moving and giving various motions to the foot and leg. Muscles consist of fibrous tissue, intermixed with nerves, blood-vessels, arteries, etc., and are subject to nerve stimuli, which allow shortening and thickening, contracting and extending, in order to provide the various movements of the bones or framework.

LIGAMENTS

The bones of the foot are held together at their joints or articulations by numerous ligaments of great

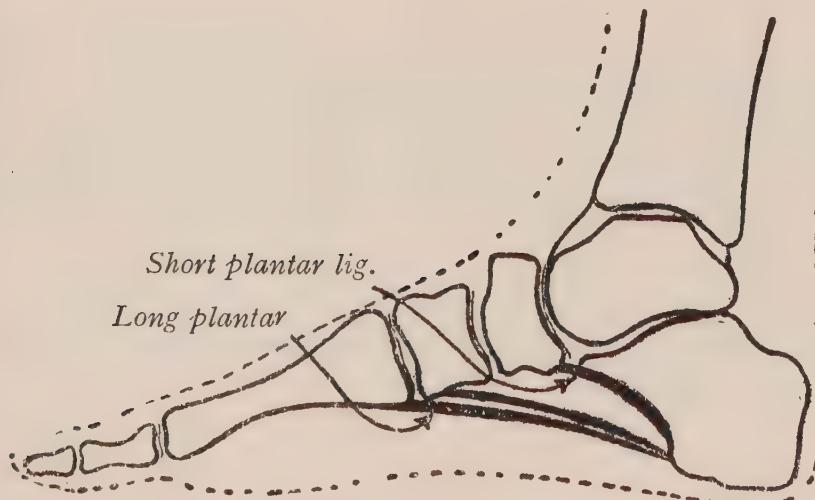


FIG. 7.—Showing the long and short plantar ligaments and how they connect and give support to the arch.

strength, and, while permitting only slight movement of each joint, they do, however, provide for considerable movement of the foot in its entirety.

Ligaments consist of bands of flexible, inextensible fibrous tissue which connect the various bones and limit the movements of the joints. The arch of the foot is principally maintained in the passive state by this fibrous structure.

When the ligaments become strained or stretched and lose their tone, they allow the bones of the foot to drop from their natural position, or articulations, which is one of the causes of broken arch and flat foot.

When this takes place the natural action of the muscles, as explained above, is interfered with, and in order to restore the strength and tone to the ligaments it is necessary to relieve the strain and abnormal pressure.

TENDONS

Tendons consist of fibrous cords (slightly flattened) which are the continuation of the muscles. The function of a tendon is to attach the muscle to the bone or bones to be moved.

(It is well for the student to observe the different structures: bones to furnish the skeleton framework, muscles that supply the motive power for giving various motions, ligaments that hold together the various joints or articulations, and the tendons that attach the muscles to the bone or part to be moved.)

The Tendo-Achillis is attached to the Os Calcis or Heel Bone, and is the largest and strongest tendon in the whole body.

REVIEW QUESTIONS FOR LESSON No. 1

TO THE STUDENT

After you have read these lessons it is well for you to answer the following review questions. If you are not able to satisfactorily answer any of the questions, then please refer to the text until it is quite clear in your mind. These review questions are not the examination, but one or more may be covered in the final examination before the diploma is issued ; therefore it is well to learn the subjects thoroughly as you go along.

- (1) How many bones in the foot?
- (2) What bones form the tarsus?
- (3) What is the largest bone in the foot?
- (4) How many bones in the toes?
- (5) In what way do the bones in the little toe differ from those in the great toe?
- (6) What is the function of a muscle?
- (7) What is the function of a ligament?
- (8) What is a tendon?

LESSON No. 2

LESSON No. 2

ARCHESES OF THE FOOT

To promote the elasticity of the foot, and to provide strength and motion in walking, so that this collection of twenty-six bones will be able to properly support the weight of the body, they are arranged in the form of arches. These arches are four in number:

- The Inner Longitudinal Arch, No. 1.
- The Outer Longitudinal Arch, No. 2.
- The Anterior Metatarsal Arch, No. 3.
- The Transverse Arch, No. 4.

The Inner Longitudinal Arch is the one most recognized by the general public as being the arch of the



FIG. 8.—Showing the inner longitudinal arch commencing on the Os Calcis forward to the first metatarso-phalangeal joint. This is the long arch of the foot.

foot, but while this arch has a very important bearing on foot troubles, the other three are also important and must be very carefully considered by the student.

The Inner Longitudinal Arch commences at the inner border of the Os Calcis from behind, and extends forward to the head of the first metatarsal. It is

composed of the Os Calcis, Astragalus, Scaphoid, Internal Cuneiform and first metatarsal, the highest point being at the Astragalus.

This arch is supported by muscle tissue, including the plantar fascia, which stretches across the concavity

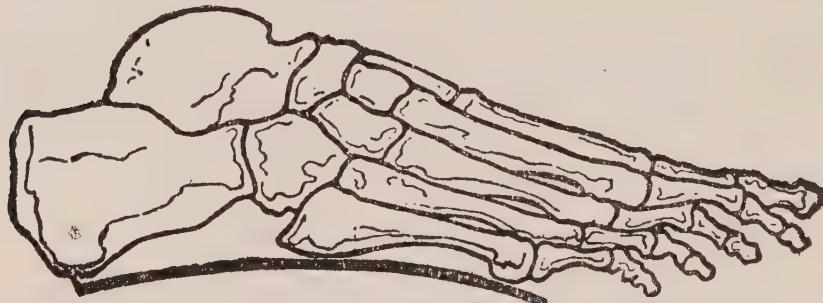


FIG. 9.—Showing the outer longitudinal arch from the Os Calcis to the fifth metatarsophalangeal joint. (Students will note that the elevation of the outer longitudinal arch is very slight.)

like a bow-string across a bow, gives elasticity, and allows a return to its original length each time weight is thrown upon the foot.

The Outer Longitudinal Arch follows the direction of the Inner Longitudinal Arch, except that it is on the



FIG. 10.—Showing the Anterior Metatarsal Arch. This arch extends transversely between the first and fifth metatarsal heads.

outside of the foot. It extends from the Os Calcis, or heel bone, to the head of the fifth metatarsal, and is formed by the Os Calcis, Cuboid and fifth metatarsal. It is well to remember that the elevation is very slight in this arch, allowing just a slight space when one stands barefooted on the floor.

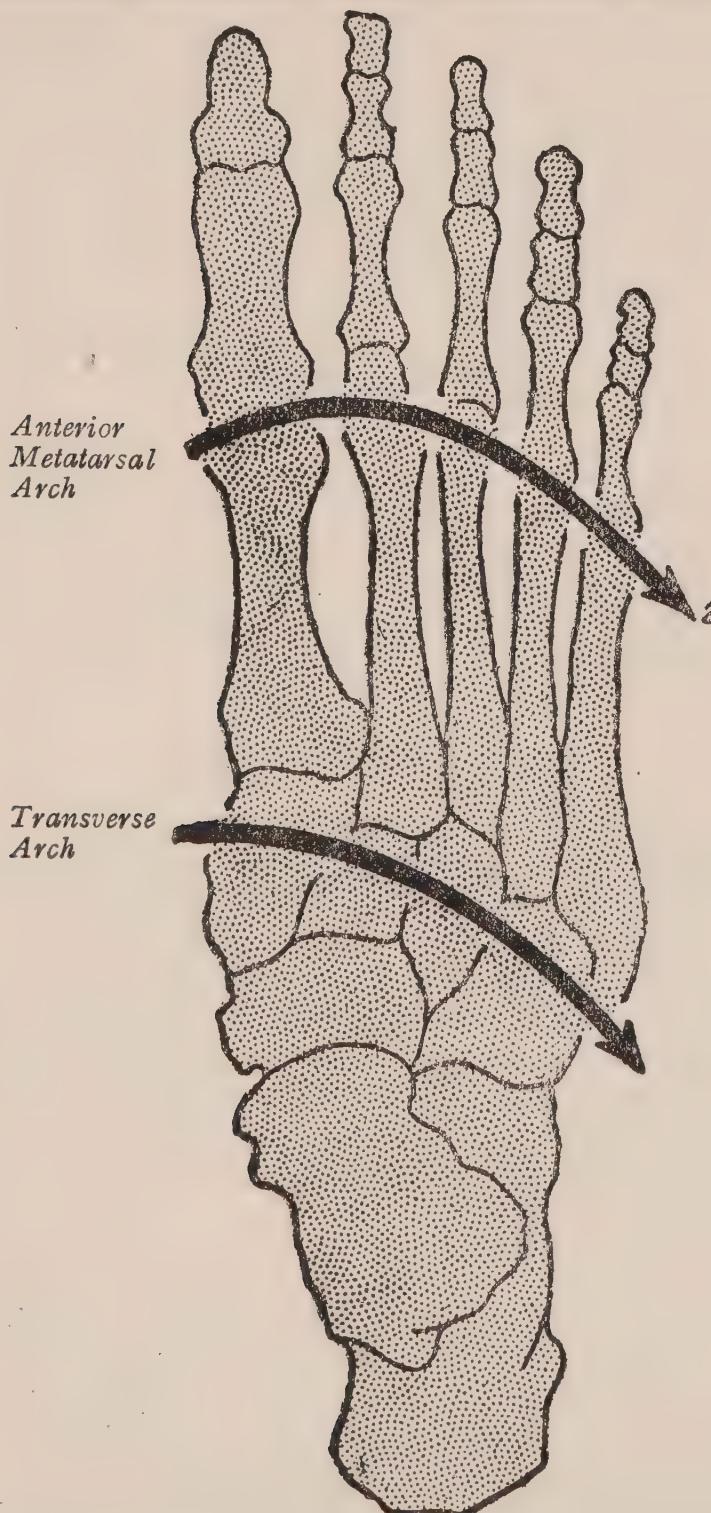


FIG. 11.—Showing the bones of the foot, top view. First pointer shows the position of the Transverse Arch, and second pointer shows the location of the Anterior Metatarsal Arch.

The Anterior Metatarsal Arch is also very important. It extends between the first and fifth metatarsal bones. It is formed by the heads of the five metatarsals. When this arch is normal there is a perfect dome-like shaping between the great-toe joint and the little-toe joint.

The Transverse Arch extends across the foot, between the Cuboid and Internal Cuneiform bone. This arch is frequently affected when there is a breaking down of the longitudinal arch posteriorly. (Posterior means the backward part, and Anterior means the forward part.)

Student : Observe that the purpose of these arches is to give strength and elasticity to the foot and at the same time to provide a hollow space for protecting the muscles, nerves, arteries and veins from pressure. For if these arches are depressed they at once interfere with other natural functions.

USE OF THE FOOT

The author's definition of a normal foot is one that performs its functions and attends to the work imposed upon it without discomfort or pain; one that has generally natural lines, in that the bones are not displaced and that the four arches are perfectly formed, and the external surfaces of the foot free from excrescences and abnormal growths, such as corns, bunions, callouses, protruding or prominent joints, etc.

The foot is intended to carry the body's weight, and it should do so gracefully, comfortably and naturally, if it is normal.

Why should people's feet tire any more than their hands? The foot is constructed for the purpose of taking the weight of the body, carrying it and doing so comfortably. If there are pains, discomforts and fatigue, the foot is not normal and therefore requires a scientific application of Practipedic treatment.

Now consider the disturbing influences which cause foot troubles. How a person may overwork, may stand

on his feet excessively long hours, may wear too tight shoes, short shoes, pointed-toe and ill-fitting hosiery, or put on weight suddenly, all of which go to distort the feet and cause abnormal conditions.

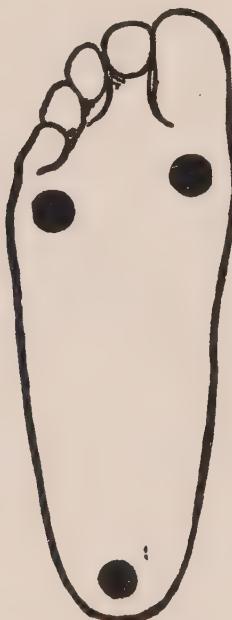


FIG. 12.—The black dots show the three bearing points of the normal foot, which are Os Calcis, the first metatarsal phalangeal joint and fifth metatarsal phalangeal joint. This gives the foot the tripod bearing points.

(*The student now having an understandable knowledge of the structure of the foot should refer to the illustrations in the preceding lessons, or obtain a skeleton of the human foot in order to more closely study this framework and its action.*)

REVIEW QUESTIONS FOR LESSON No. 2

TO THE STUDENT

This lesson covers a very important section in the study of Practipedics, and so that you will have no difficulty in thoroughly understanding all of the different points contained in this lesson, the instructor asks you to be particular that you can answer the following review questions. It will be very useful to you as you go along:

- (1) How many arches in the foot?
- (2) Name them.
- (3) Where is the inner longitudinal arch located?
- (4) What bones form the transverse arch?
- (5) What bones form the anterior metatarsal arch?
- (6) Why is it so important to understand thoroughly the arches of the foot?
- (7) How many bearing points in a normal foot?

LESSON No. 3

LESSON No. 3

This lesson will be given up to the study of abnormalities—the underlying causes of foot troubles. You will notice that in each instance there is an involvement of the bones or framework of the foot. This is very important for you to understand. Every man who fits feet, sells shoes or has to do with footwear, should possess the knowledge that you have now gained and put it to practical application.

WEAK OR FALLEN ARCH—WEAK FOOT

WHEN the ligaments which hold the bones forming the arch in their natural arched positions become strained or lose their tone, a condition of weak or fallen arch results. This is strictly a weakened foot condition. You will find this condition among men and women, probably more among the latter.

The weak foot condition is the first stage of a condition later developing into broken-down arch or flat-foot. This early stage is more prevalent, and is less understood and recognized by the public. It is, nevertheless, a condition that the Practipedist should be careful to recognize and apply the proper corrective appliances so as to prevent the more serious and advanced stage of foot weakness.

It is well for the student to understand, while on this subject, that the weak foot and flat-foot conditions can be divided into several stages of development:

No. 1—Weak foot, the early stage of.

No. 2—Weak foot where the arch is somewhat flattened in the act of standing.

No. 3—Weak foot where there is a structural change in the contour present.

No. 4—Advanced flat-foot where the foot has lost its natural arching and assumes a flattened condition.

By classifying these stages you will be able to more

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quickly recognize the different defects and know that in many cases there is need for a scientifically adjusted



FIG. 13.—This sketch shows a typical case of weak foot where the arch is somewhat flattened.

appliance, even though the outward appearance of the foot is nearly normal, such as you will find in condition No. 1.

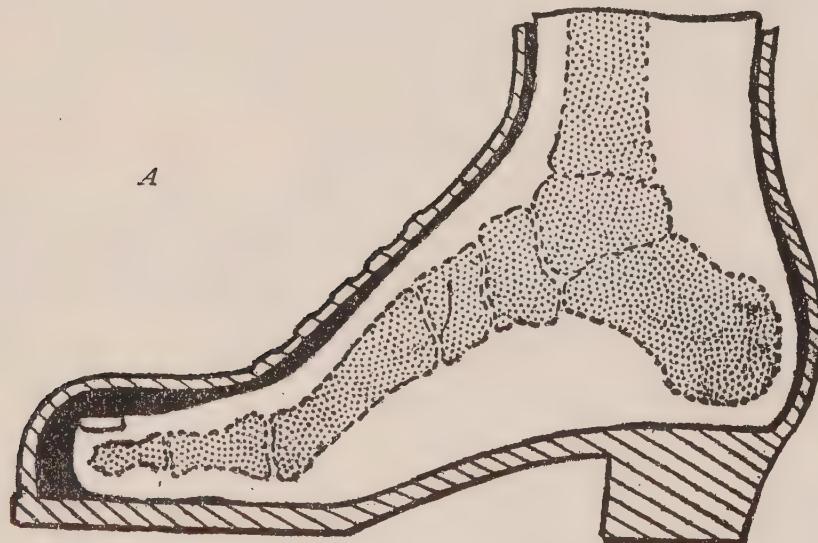


FIG. 14.—Sketches show approximate position of foot in shoe. Please note A and B.

(A) Showing approximate position of bones in a normally arched foot, and how by being properly arched the foot is held up and toe is kept away from end of shoe.



(B) Showing relative position of bones in a weak arch, and how it permits the foot to elongate and be pushed into the toe of the shoe.

WEAK FOOT

When the shoes are removed the feet may appear perfectly normal; in fact, in many cases, the arches are high and appear well developed, while there is, however, a flabbiness and loss of tone to the tissues.

SYMPTOMS

The person will complain of tiring and tenderness in the heels, a tendency to sudden turning of the ankle, and occasionally the ankles become swollen and painful.



FIG. 15.—Showing a weak foot with very nearly normal shape of inner longitudinal arch.

Constant standing or walking causes general discomfort in the feet. Tiredness saps vitality, and is due to the weakness and strain on the foot structures. The foot usually slides forward into the toe of the shoe, causing discomfort to the toes. The customer will also complain that the shoes do not fit and feel comfortable. There is a tendency for the ankles to rotate. The feet sometimes burn on the soles and are extremely tender, while in other cases the feet appear cold and uncomfortable in that way. Another sign is callouses along the great toe on the ball of the foot.

CAUSES

The cause of weak foot is practically the same as flat-foot. Flat-foot is the advanced stage of weak foot, which develops into the flattened condition. There are many causes. Those who do much standing in one position, or do much walking, are subject to this condition. Improper shoes and improperly fitted shoes weaken the foot structure. Occupational causes seem to be very prevalent. Those who are compelled to stand long hours on their feet, such as waiters, barbers, postmen, shop assistants, domestic servants, machinists, barmaids and policemen, are all subject to foot strain, which later develops into a condition of flat-foot. Over-work, strain, constant wrenching, illness, etc., which weaken the tissues, are some of the causes; adults who take on increased weight suddenly, or who carry heavy weights, which cause undue strain on the ligaments and muscles of the arch, are apt to find themselves affected with weak foot conditions.

Favouring a certain portion of the foot, to escape the pain of a corn, callous or bunion, or throwing the weight on to one foot because of an injury or painful condition of the other foot, changing from one style of shoe to another, wearing short and pointed-toe hosiery, changing from a high heel to a low heel, cause abnormal strain and weakness.

Among children, it is caused by rapid growth and acquiring abnormal weight before the structures have accommodated themselves to additional strain. This condition is frequently present among children between the ages of five and fourteen.

DIAGNOSIS

Cases of weak foot can be diagnosed, first, from the signs and symptoms as outlined above. Second, by asking questions. Third, by manual examination, as palpation and twisting the foot. Fourth, examining the shoes. It is very easy to notice whether the shoe

is spread out of shape, whether the heels are run down, and if the shanks have lost their natural arched shape.

It should be borne in mind that in stage No. 1, when the shoe is removed the foot will look practically normal, and therefore the early stage of weak foot should be diagnosed from the signs and symptoms, and queries put to the customer such as:—

Do your feet tire? Do the soles of your feet burn? Are they tender? Do your toes feel cramped? Have



FIG. 16.—Testing the foot for weak arch. With one hand take hold of the heel and with the other hand bring pressure against the ball and also manipulate to see how much resistance there is to the structures.

you weak ankles? Do you tire easily after standing or walking? Do your feet perspire?

Then examine the foot. By putting pressure on the head of the first metatarsal while you grasp the heel you can see whether there is weakness present, and whether it is in the first or second stage of development. Always look at the customer's shoes very carefully; they often give you an idea.

PRACTIPEDIC TREATMENT

The first thought is to give comfort to the wearer and to prevent further development of the weakened

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foot condition. This is done by fitting the light, springy appliance—Dr. Scholl's "Foot-Eazer."

The correct size should be first selected, and it should then be fitted to meet the contour of the foot, arched so as to support the bone structure and prevent further strain and tension on the already weakened or deficient foot structures.

The Foot-Eazer is of double spring construction so that the top plate slides easily on the under spring, giving firm support, yet permitting a certain amount



FIG. 17.—Showing application of Foot-Eazer to a weakened arch. It should be arched high enough to fit snugly into the cavity of the arch.

of flexibility and motion so as to stimulate muscular activity. The foot should be carefully measured to ascertain if the patient is wearing the proper size shoe, so that the ball of the foot will set at the broad part of the tread or at the inner shank curve.

In addition, look to the stocking. If the customer has been wearing short or pointed-toe stockings, he or she should be told to wear a kind that will overcome any restriction and permit free use of the foot and toes. See Lesson No. 5, on the use of arch-fitting machine for adjusting of appliances to the individual foot.

WEAK FOOT, WHEN THE ARCH IS SOMEWHAT FLATTENED IN THE ACT OF STANDING

In this stage, when the customer stands, there is a slight tipping in at the inner border of the arch or ankle-joint. The foot also elongates quite considerably



FIG. 18.—Showing a weakened arch with enlargement at the great-toe joint and bunion formation.

when weight is placed upon it. There is a slight spreading. (The outer longitudinal arch should be slightly arched without touching the floor when standing.)

SYMPTOMS

Symptoms in this stage are practically the same as those already described, except that they become slightly more acute, because of strain thrown on the already weakened foot.

In this stage greater weight is thrown upon the first metatarsal phalangeal joint, which often produces a redness, tenderness and even swelling. The toes are cramped, shoes are thrown out of shape, the patient complains of extreme discomfort, and rotating of the ankle outward or inward is noticeable. There are

pains through the heel and ankle, and often swelling. Pressure on the arch will cause it to slightly flatten. The heels of the shoes are worn crooked. The person will complain that walking over rough pavements or cobble-stones or on rough, uneven surfaces will cause wrenching and pain on the sole. There is also tenderness and sometimes pain or a callosity along the edge of the fifth metatarsal, extending out to the ends of the toes. Callouses also appear around the heel and on the ball of the foot.

CAUSES

The causes are practically the same as weak foot in the early stage, as previously explained. Of course, after the foot has become even slightly weakened the condition advances more rapidly, because the same feeling of support which the shoe counter gives is lost, and with the disturbance of the balance or poise of the foot the strain becomes more severe.

Then again, where there is a weakened inner longitudinal arch, it naturally causes a spreading transversely, forcing down the outer longitudinal arch, and causing still more strain to the ligaments.

DIAGNOSIS

In addition to putting the queries to the patient, examine the foot carefully. You will find tender and painful areas. These can be located by pressure with your thumb or index fingers over the different areas of the foot, such as the base of the heel where the plantar ligament and fascia is attached.

There is usually slight pain or tenderness there. Pressure should then be exerted at the different metatarsal heads, commencing at the first metatarsal-phalangeal joint by manipulating the great toe. See if there is tenderness in the outer longitudinal arch. Have

the patient stand, and notice if the weight causes the ankles to turn in or out and if the arches are lower.

Again examine the shoe. Note if there is any swelling through the ankle or through the foot. Ask your customer questions that will lead up to this. It is very easy to diagnose this condition, because there is invariably callous formation, burning or tenderness on the soles, and the patient usually complains of the shoes



FIG. 19.—Showing a weak foot where structural change has taken place. In these cases the Astragalus rotates inward and in examinations you can notice the prominence of these bones.

being the cause. It is a fact that persons having this trouble will blame their shoes.

Run your hands inside the shoe and notice if there are any depressions or wrinkles caused by uneven distribution of the weight and a tendency for the foot to stretch out, because in this stage the arch weakens and allows the foot to elongate and stretch more than in the normal.

In this stage will be found also many complaints of short shoes. The patient will be fitted with a shoe sufficiently long, and in a few days' time complain that it is too short. Therefore, it is well for the Practipedist to set a rule where there are complaints of short

shoes to make examination for the secondary stage of weak foot.

PRACTIPEDIC TREATMENT

Treatment is practically the same as given in condition No. 1. The Foot-Eazer or Tri-Spring Arch should be applied. If the person is heavy and the weakness quite pronounced, the Tri-Spring Arch Support should be applied. It gives a wider base for support. In these cases the appliances should be fitted up into



FIG. 20.—Showing the Foot-Eazer fitted with weight on the foot.

the contour of the arch so as at once to support the bone structures and remove the strain on the ligaments and plantar fascia. In this stage the appliances should be fitted to hold the arch in a nearly normal position. If the arch support is fitted quite closely up to the natural arch there will be less uncomfortable feeling than if it is lowered so that the weak foot is forced down to meet the elevation of the appliances. The operator should take care to select the suitable Foot-Eazer or Tri-Spring Arch Support indicated by the condition of mal-position, and adapt it so as to remedy the defect.

Again, hosiery and footwear should be given careful consideration, and in this condition, where the weakness

is more pronounced, it is well to advise the use of Dr. Scholl's Pedico Foot Soap, Dr. Scholl's Foot Cream and Dr. Scholl's Antiseptic Powder. These three articles should constitute the home treatment of the patient, and are essential in obtaining the best results from the use of the appliances.

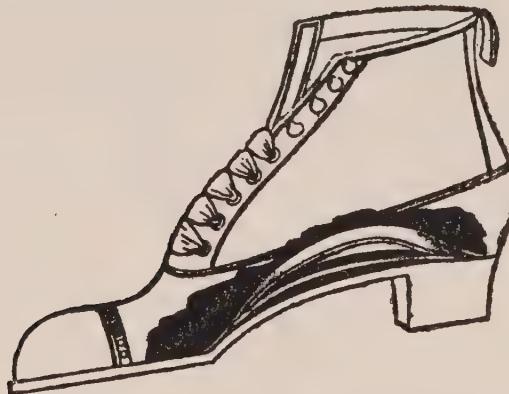


FIG. 21.—Showing the Foot-Eazer inside the shoe and how it spans the weight from heel to ball. This corrective appliance does not rely upon the strength of the shank of the shoe in making corrections.

This treatment first thoroughly cleanses and opens the pores of the skin, stimulates the circulation, tones up the muscles and prevents an accumulation of unhealthy skin secretions, keeping the feet soft and pliable.

WEAK FOOT WHERE THERE IS A STRUCTURAL CHANGE IN THE CONTOUR PRESENT

The outer longitudinal arch is flattened so that the Cuboid bone and the heel of the fifth metatarsal practically touch the floor.

In this condition, the sufferer usually resorts to some home treatment or takes to shoes with rubber heels, and applies liniments and salves. In this stage, one recognizes something is wrong with the feet, while in the other two conditions just described persons very frequently are of opinion that the discomfort and pain are produced by unsuitable shoes, or result from over-exertion or more than usual use of the feet.

SYMPTOMS

There is considerable pain present in all parts of the foot. There is invariably a tenderness or painful condition at the tuberosity of the Os Calcis (forward part of base of heel). There is likewise a painful condition at the great-toe joint. There is pain present upon motion of the foot, swelling about the ankles, pains extending into the calves of the legs, knee, and often into the



FIG. 22.—Showing flat-foot and rotated ankle.

thigh. The feet are hot and feverish, and are often so swollen that it is impossible for the person to wear the usual shoes with comfort.

In other cases there is a clumsy, stiff feeling in the feet upon arising in the morning; in fact, it is frequently practically impossible for the patient to stand barefooted until slight and careful motions have gradually been made. It is not until after the person has done a little

walking that the stiffness disappears. Then the pain is less severe until the middle of the afternoon, when it becomes quite pronounced, and the first thought of the sufferer is to get home and be able to remove the shoes.

By elevating the feet they are made more comfortable. In this stage callouses are present, as in Condition No. 2. The feet perspire profusely, especially around the heels.

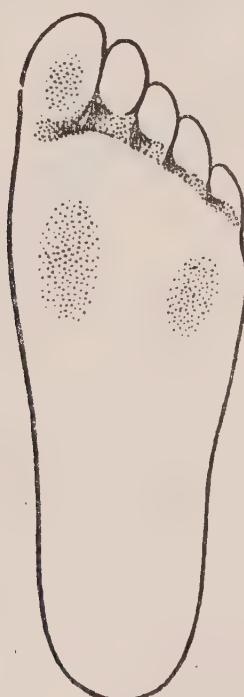


FIG. 23.—Showing tender spots and callous formation caused by weakened arch and flat-foot condition. These callouses are caused by uneven distribution of the body's weight, and are one of the symptoms of a weakened arch condition.

It is not unusual to notice the lining of the shoe destroyed from this excessive perspiration. The person walks with a slouchy, dragging gait. The feet are turned outward. The heels are worn down at the inner border. The soles are worn through at the base of the first metatarsal. Shanks are broken down, and frequently the Anterior Metatarsal Arch is involved. There is a cramping of the toes.

In nearly every instance the third, fourth and fifth toes are slightly contracted and corns form on the top of the joints. Persons in this stage complain of gout, and pains resembling rheumatism. They frequently attend bathing resorts and take rheumatic treatments.

CAUSES

Again the causes are practically as outlined in the beginning of the lesson. The student will soon acquire sufficient knowledge so that he will add to the list of



FIG. 24.—Testing the foot to see if there is any rigidity or adhesions in the region of the arch.

cases from his actual experience. It is well to obtain as much information from the patient as is possible, but to keep on the look-out for improperly fitted shoes, pointed-toe stockings, constant standing or walking, standing in one position, favouring the feet to escape pressure on a corn or callous, heavy weight bearing, wearing of ordinary rubber heels, debilitated physical condition, etc. These are the principal causes.

In some cases the patient may have had rheumatic neuritis which caused a weakness of the feet. Certain diseases, such as tubercular, will cause erosion at the articulating joints, producing weakness and pain. Again,

pus absorption from ulcerated teeth, infected tonsils, etc., which is deposited into the weakened structures, may cause erosion and pain.

PRACTIPEDIC TREATMENT

In this stage treatment is practically the same as No. 1 and 2, except that where structural changes have taken place more support must be given. The object is to lift the displaced and depressed bones to their

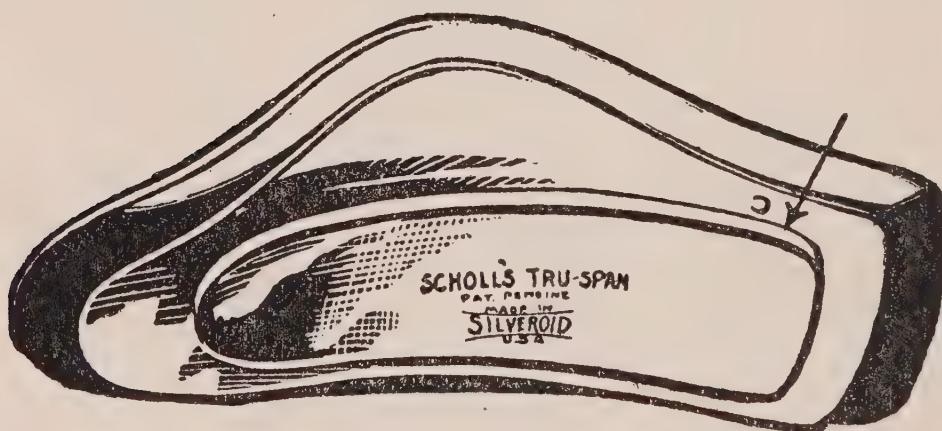


FIG. 25.—Showing Tru-Span Arch Support with reinforcement for severe cases.

true positions. This, of course, must be done gradually, so the appliances, although allowing certain springiness, should be of a substantial character and designed to firmly hold the bones and remove the strain and tension on the ligaments and muscles.

Dr. Scholl's Tri-Spring Arch Support is best indicated in these cases. The Tru-Span style affords slightly additional corrective pressure, in that the plate is a trifle wider and higher at the inner border of the flange.

A Foot-Eazer, of course, may be used where the case is not so severe and the person not so heavy, or it can be applied as a preliminary treatment, and later on apply Dr. Scholl's Tru-Span Arch Support.

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In these cases the pressure exerted by the support should not be too severe, because when the bones are pressed down and forced out of their normal positions they must be gradually lifted up and brought back without causing discomfort to the patient.

In this stage muscular action is greatly interfered with by the pressing down of the displaced bony framework. The arteries and nerves are not protected and, therefore, have abnormal pressure and strain thrown upon them. In all of these cases the object of the Practipedist should be to remove the cause and

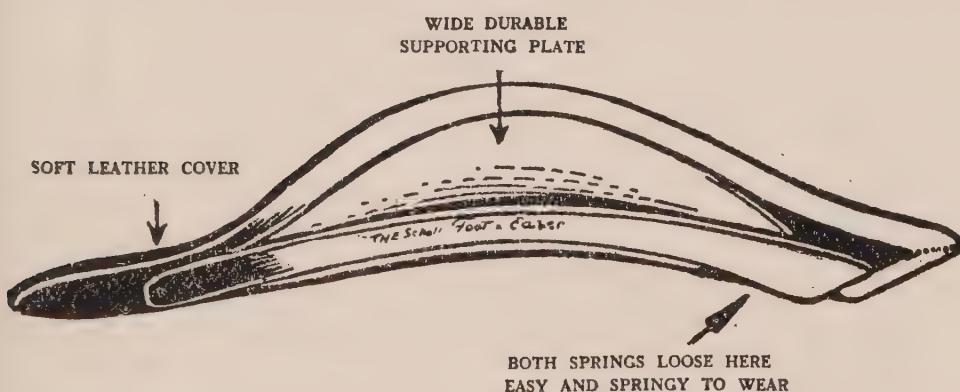


FIG. 26.—Showing Foot-Eazer construction with a free sliding contact at the forward end. This feature permits adjustability and springiness to the foot.

bring about normal functioning. Muscles cannot properly perform their duty if there is a strain and pressure brought to bear on them and on the nerves.

By fitting one of the appliances as designated above, strain is removed from the ligaments, the bones replaced in normal position, and natural muscular action and development restored. In these cases the home treatment should always be recommended. The tender joints or calloused spots should be protected from further pressure and irritation by applying the proper size Zino Pads or Absorbo Pads.

It should be borne in mind that where correction is provided for these abnormal conditions, or for strain and deformity, the appliances may at first, although

perfectly fitted, cause some slight discomfort or annoyance to the patient.

If the customer complains of pressure or pain at any one point, after you have carefully observed all the rules for fitting the appliances, the appliances should be removed and a further slight adjustment made. It is essential to send the customer out of the shop feeling perfectly comfortable and contented with the mechanical help that you have provided. This may require a little

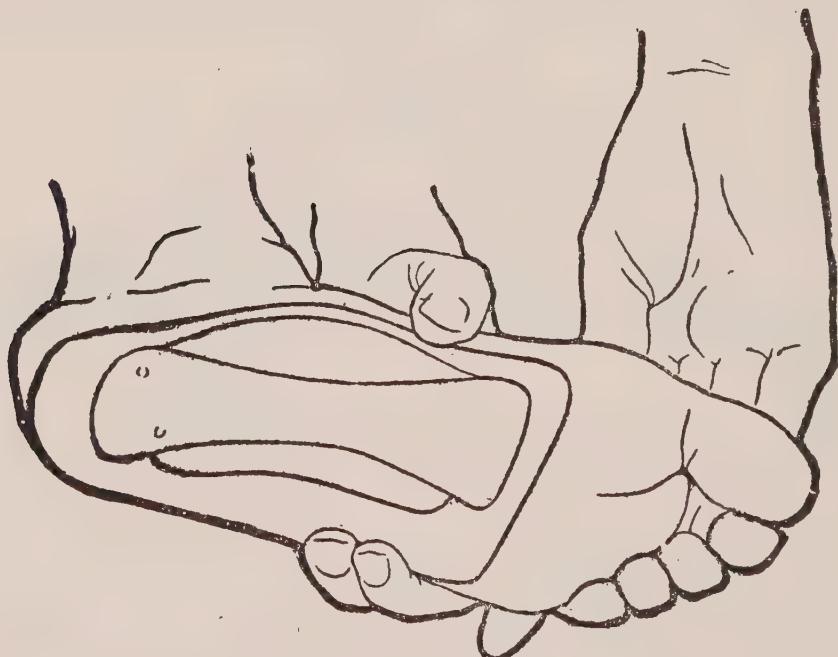


FIG. 27.—Showing correct length of the Foot-Eazer as applied to the bare foot.

more effort, and occasionally a slight lowering or raising of the appliances at some given point, but it is well worth the effort. Ask the customer to return in a fortnight's time, so that you may make whatever readjustment is required.

There are cases under the same heading, however, where the supports can be fitted too low, compelling the high point of the foot to be forced down in contact with the resistance or elevation of the high point of

the appliance. In that case it is necessary to elevate the support still higher to meet the high point of the arch.

ADVANCED FLAT-FOOT WHERE THE FOOT HAS LOST ITS NATURAL ARCHING AND ASSUMES A FLATTENED CONDITION

This condition can be subdivided into the rigid type of flat-foot and the flexible type of flat-foot. In the former the tarsus of the foot is practically rigid. It is



FIG. 28.—Advanced case of flat-foot.

due to long existence of the condition so that false adhesions have been made, and Nature, in her attempt to make good use of the deformed condition, has practically glued the joints together, so that there is little or no elasticity present.

In this condition the foot may assume an entirely flattened position, but there is slight movement possible at the various articulations. In these cases the ligaments supporting the longitudinal arches have become so stretched that they are unable to contract or hold the bones in their natural arched positions, and the weight of the body then crushes down and interferes with correct muscular action and gradually flattens the arch. This is what is rightly termed flat-foot or broken-down arch.

SYMPTOMS AND SIGNS

Rheumatic-like pains all through the feet and ankles. The feet are turned outward, and there is a shuffling, dragging gait. Pains radiate through the ankles, heels,

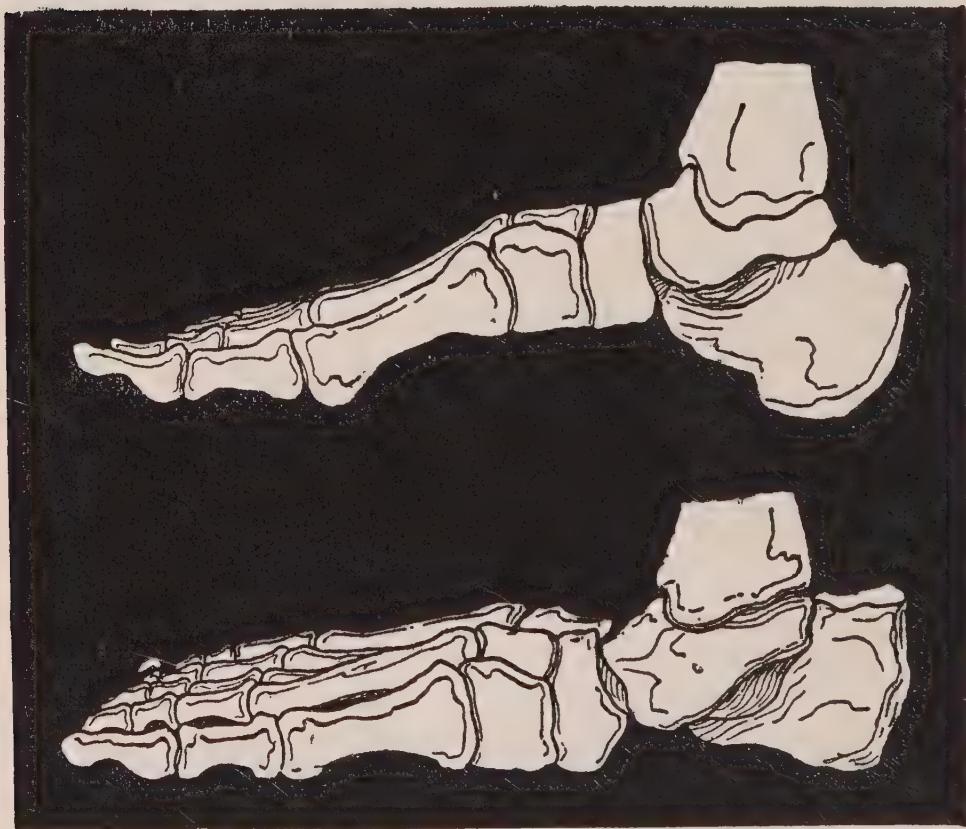


FIG. 29.—Showing the bones of a perfectly formed arch and the relative position of the bones in a severe case of flat-foot.

and into the limbs and knees. There are often corns and many callous spots present, and if the foot is manipulated by grasping the heel with one hand and the fore-part of the foot with the other, the pains will be noticed. By giving slight twisting great pain is experienced. The elasticity and springiness of the step are lost, equilibrium and balance of the body are disturbed through the

flattening of the arch. Nervousness and droop-shoulder often result, and the circulation is greatly impaired, so that the feet are cold, numb and congested, while in other cases they perspire excessively.

Probably there are soft corns between the toes and enlarged joints at the big and little toes. The shanks



FIG. 30.—Showing a weakened arch without weight upon it and position it assumes when the person stands.

of the shoes are broken down, throwing wrinkles around the top, and the soles are worn off at the inner border. This condition is found among men, women and children in all walks of life, but more frequently among those who remain long hours on their feet, and also among the poor and labouring classes, as it is the natural consequence of neglected weak foot.

CAUSES

Same as already explained in weak foot, except that flat-foot is the result of neglect, sometimes in early childhood and sometimes in adolescence. It is well for the student to recognize in his own mind the importance of this statement, and he should exert himself in recognizing the condition before it develops to such a severe stage.

It has been stated by many with acquired flat-foot



FIG. 31.—Flat-foot with Metatarsalgia. Note how the toes are drawn back and corns are forming on the top of the joints.

in the last stages that it was hereditary. This is hardly possible, but is more apt to be the result of acquired flat-foot development during early childhood, so that in later years the sufferer would naturally be of the opinion that it was of hereditary origin.

It is, therefore, well for the student again to remember that flat-foot can be prevented by caring for the feet of growing children from the time they begin to walk until they are fully developed. Weak ankles, toeing in, toeing out, knock-knees are almost always the result

of weakened foot structures, and the child should be fitted with Dr. Scholl's "No. 27" Support, which is made in single sizes for men, women, boys, misses, and children, and is designed for use in cases of weak and rotating ankles. This Support, made with a high inner flange and longer plate, gives great relief and correction.

DIAGNOSIS

It is not difficult to diagnose this condition because of the marked outward appearance. In fact, flat-foot

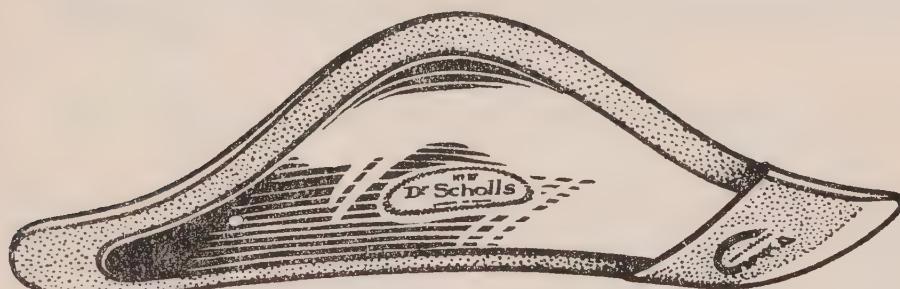


FIG. 32.—Showing No. 27 Arch Support with single plate construction.

can be recognized on the street by the shuffling gait, by the way the shanks of the shoe are broken out, and by the clumsy carriage of the sufferer.

These cases require careful adjustment and fitting of either Dr. Scholl's Tri-Spring Arch Support or Dr. Scholl's Tru-Span Arch Support. The supports should be lowered so as to exert only slight pressure. They should never be higher than the present arching of the foot, and by beginning at that low point they can be gradually raised so that slight pressure is exerted, which will have a tendency to break up the incipient adhesions.

On this point it is well to know that frequently you come in contact with cases where the customer states that his feet cause him no pain, even though admitting that he or she is flat-footed. In these cases point out that the feet are the weak point of his anatomy, and in the event of illness or infection or any physical distur-

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bance the weak part is the first involved. Furthermore, as the person advances in age the tissues are not as strong and the resistance is lessened, and you will be enabled to give permanent comfort and relief if the

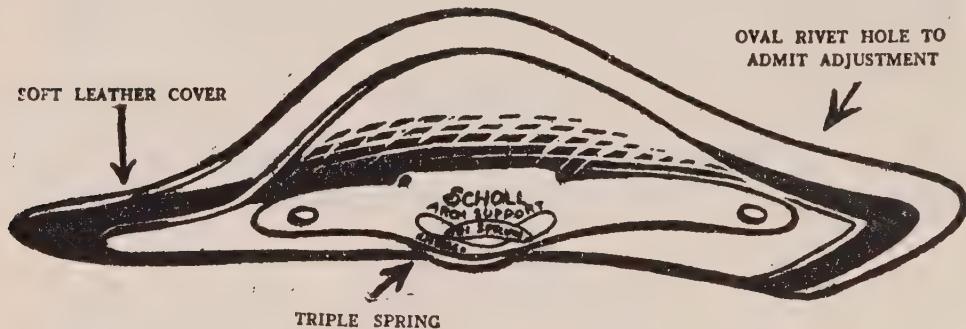


FIG. 33.—Showing [Tri-Spring Arch Support] with triple spring reinforcement.

customer takes the precaution of being fitted with arch supports as designated above, even though a permanent correction of the deformity is doubtful. Furthermore, these appliances, fitted to this severe rotated type condition, will hold the foot up and prevent it from sliding forward into the toe of the shoe, also preventing breaking down of the shank of the shoe.

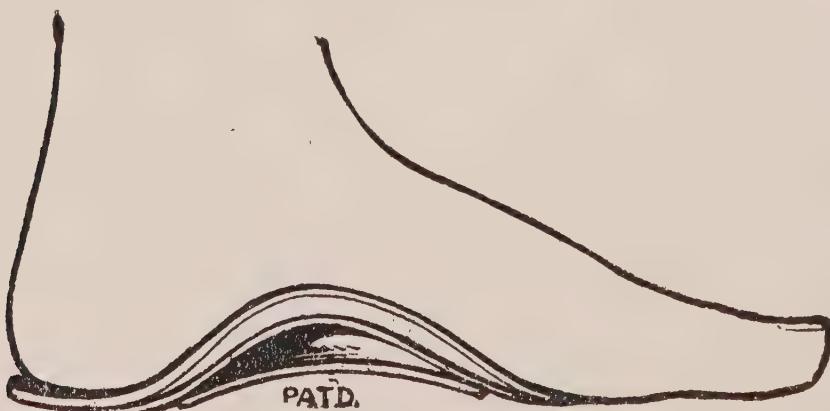


FIG. 34.—Tru-Span Arch Support fitted to the foot. This support is intended for severe cases, and where a very substantial and durable support is required.

In the flexible state, or where there is some motion upon manipulation, more support can be given, com-

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mencing with a low elevation and gradually increasing as improved conditions manifest themselves. It is very important to recommend the use of the Home Treatment and the wearing of hosiery that will not in any possible way restrict the full use of the foot.

Great care should be taken in selecting and fitting a shoe that is the correct length, giving ample room for the toes. It should be wide at the ball and snug-fitting at the heel and instep.

DR. SCHOLL'S Latest Scientific Arch Supports

THE more recent Dr. Scholl's appliances embody the results of years of research work and experiment, and are constructed so as to give additional relief and correction.

For Foot-Eazer any of the following qualities can be substituted:—

“Durolite” Foot-Eazer.

“Kiropedic” A.

“Osteopathic” A.

“Medical” A.

“Surgical” A.

For Tri-Spring, any of the “A” Styles reinforced with brace.

REVIEW QUESTIONS FOR LESSON No. 3

TO THE STUDENT

This is a very important part of the course. It is well to review carefully, so that the principal points will become thoroughly clear and fixed in your memory. The work of relieving conditions covered in these lessons gives you wonderful opportunity, as a very large percentage of men, women and children are sufferers. Decide to be on the alert and careful to examine every foot. Look at the shoe, ask the customer questions. That is one of the finest ways of diagnosing—by asking questions. You at once create an impression that you are interested in giving your customers comfort and that you possess more than ordinary knowledge on the subject of the foot.

The proper way of fitting these appliances will be fully described in another lesson.

- (1) What is weak foot condition?
- (2) How many conditions of weak or flat foot are there?
- (3) Describe each condition.
- (4) What are the symptoms of weak foot?
- (5) How would you diagnose a case of weak foot?
- (6) What would be a practipedic treatment?
- (7) In addition to mechanical appliance, what other treatment would you recommend to your customer, and why?
- (8) What are the symptoms of severe flat-foot?
- (9) What is the treatment?
- (10) In what way does a severe case of flat-foot differ from an early case of weak foot?
- (11) Why would you look to the matter of hosiery and shoes in treating flat-foot?

LESSON No. 4

LESSON No. 4

As explained to you in Lesson No. 2, describing the arches of the foot, the Anterior Metatarsal Arch extends between the first and fifth metatarsal bones, at the ball of the foot. Now, when the ligaments and muscles supporting this dome-like shape at the heads of the metatarsal bones become strained or weakened, they are unable to furnish the necessary strength and support,



FIG. 35.—Dotted line represents the transverse section showing the Anterior Metatarsal Arch of the foot. In the normal foot there is an elevation following the dotted lines, looking at the foot from the plantar surface.

and a condition occurs, in this part of the foot, almost identical with that of a broken-down longitudinal arch.

Sometimes only one or more of the bones becomes depressed, and occasionally the entire arch is obliterated. This condition is known as broken-down Anterior Metatarsal Arch or Metatarsalgia.

A cramp-like or excruciating pain, usually evidenced in the region of the head of the fourth metatarsal bone, and caused by a nerve impingement consequent upon the displacement of that metatarsal bone, is described

as Morton's Toe. This pain causes the sufferer immediately to remove the shoe and rub and compress the toes in order to obtain relief.

SYMPTOMS AND SIGNS

The first symptom of broken-down Anterior Metatarsal Arch is tenderness accompanied by redness on the ball of the foot, covering the area of one or more

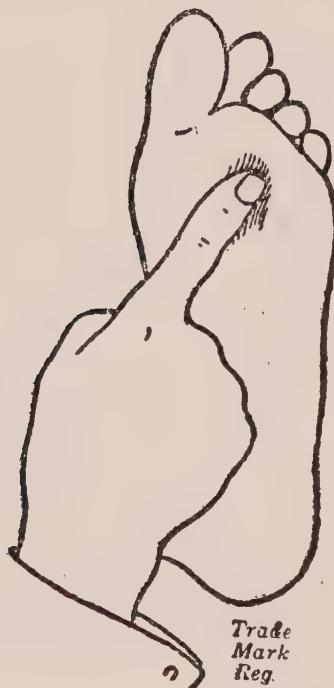


FIG. 36.—Finger pointing to location of depressed Anterior Metatarsal Arch

metatarsal heads. After this tenderness pain is experienced and a thickened skin or callous develops. The toes feel cramped and are drawn backward. There is an enlargement at the first and fifth metatarsalphalangeal joints, with severe redness, and pain is caused by pressure of the shoe. Later on, thick callouses occur on the soles. These are the result of undue pressure

on the second, third or fourth metatarsal head. Sometimes pressure is thrown on three of the metatarsals and, instead of assuming its concave shaping, the arch is actually convex, and instead of the weight being carried at the tripod points, as mentioned in Lesson No. 2, the

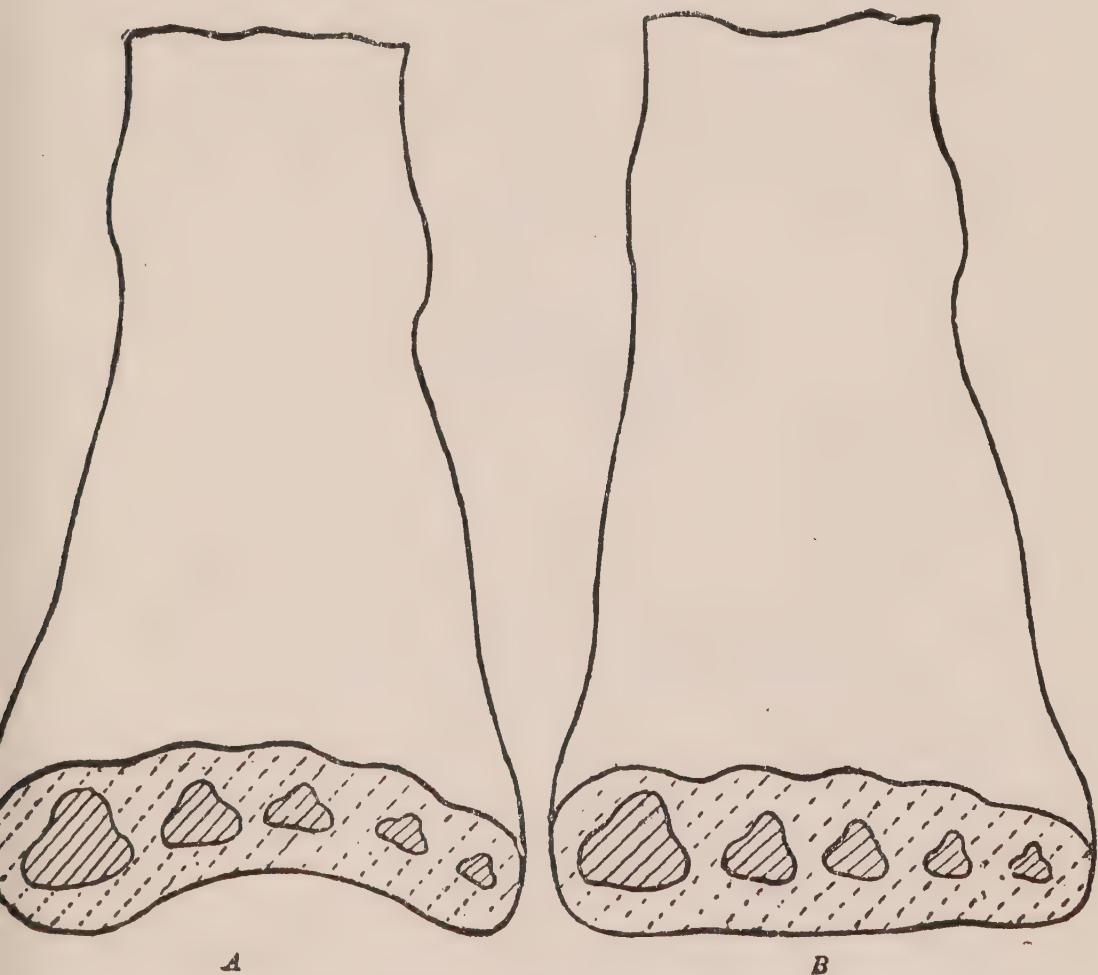


FIG. 37.—(A) Showing the normal arching of the metatarsal bones, about one-half inch from the heads of the metatarsals. (B) Shows position of these bones in a case of Metatarsalgia.

middle metatarsal bones are pushed down so that the first and fifth do not carry any of the weight.

Soft corns develop between the toes. This is caused by a slight twisting of the proximal phalanges, which causes rubbing and pressure that sets up an irritation.

Ninety-five per cent. of the soft corns between the toes can be traced to broken-down Anterior Metatarsal Arch. The fore-part of the foot swells, and it takes some little time for the pain to subside. This cramp-like pain, which is most severe and excruciating, is found most frequently among women and growing girls. It is sometimes accompanied by flat-foot or weakened longitudinal arch.

In cases of weakness in the Anterior Metatarsal Arch



FIG. 38.—Showing callous spots on sole caused by Metatarsalgia. Callouses sometimes form on the small areas where the pressure on the metatarsal heads is the greatest, while at other times there may be one large callous covering the entire ball of the foot.

the foot spreads over the sole of the shoe at the ball, throwing the shoe out of shape.

CAUSES

Unequal distribution of the body's weight, strain caused by short and pointed-toe shoes, high heels, short and pointed-toe stockings, are usual causes. Tight and narrow shoes, sprains, sudden wrenching,

jumping on the toes (as in the case of athletes) and dancing (where the weight is carried greatly upon the ball of the foot) are other causes.

DIAGNOSIS

The condition is first recognized by the toes having a contracted, drawn-back appearance; second, by callouses on the soles, by an enlarged great-toe joint or little-toe joint, by flattened or convexed condition of the Anterior Metatarsal arch. A very sure way is to hold the top of the foot with the left hand and with



FIG. 39.—Showing Metatarsalgia with Flat-foot. In these cases the longitudinal arch must be given support and correction as well as the Anterior Metatarsal Arch. Students will notice how the toes are drawn back, causing a contraction or slight hammer-toe condition. In nearly all cases of Metatarsalgia there is a tendency to crowding, cramping and contraction of the toes.

the right hand bring pressure on the heads of the different metatarsals. If there is pain you have located the seat of the trouble. Frequently the patient will jerk the foot when even slight pressure is produced at the base of the depressed metatarsals, and in like manner you are able to locate the seat of the nerve impingement which causes the severe and constant cramp. Again, by placing pressure at the ball you are able to recognize the extending of the toes. When the patient stands the foot spreads, making prominent the first and fifth joints. Care should be taken in the diagnosis, however,

as in some cases callouses do not occur and the enlargement of the first and fifth metatarsal joints is not present, and pains are of a spasmodic nature. A patient may suffer but one attack in several months, while another attack may occur very suddenly.

PRACTIPEDIC TREATMENT

A mechanical appliance is the only form of treatment that has proved successful. Dr. Scholl's Anterior



FIG. 40.—A manner of testing the Anterior Metatarsal Arch. By bringing pressure to the second, third and fourth metatarsal heads you are able to see if there are any displacements.

Metatarsal Arch Support is indicated in all cases. The support is made with a fan-like broadening at the base of the metatarsal heads to fit the heads of the metatarsals with a dome-like support, arching transversely so that elevation can be given just where it is required. The object is to change the position of pressure by elevating

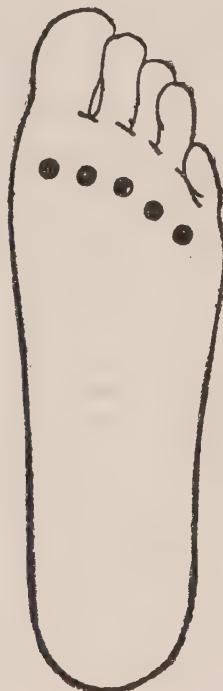


FIG. 41.—The black dots show the location of the metatarsal phalangeal articulations. In fitting Anterior Metatarsal Arch Supports the leather should extend evenly to the metatarsal joints, but not beyond.

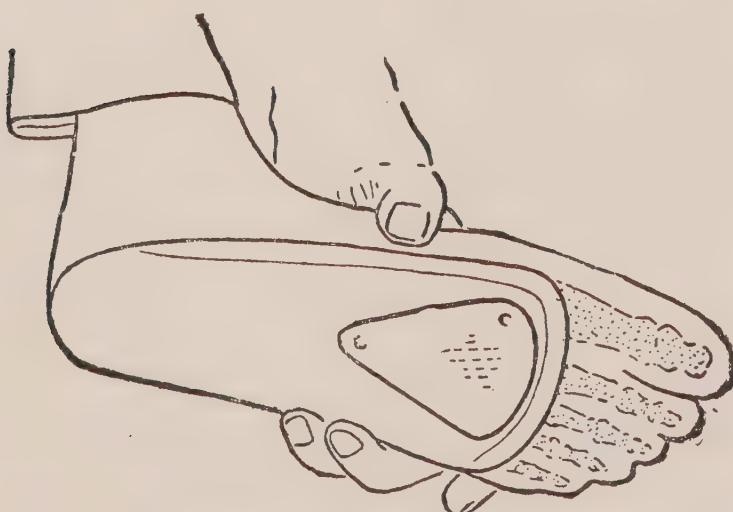


FIG. 42.—Showing the Anterior Metatarsal Arch Support, Style No. 4, applied to the foot and held in position, and sectional view of the bones showing how far forward the leather of the arch support should extend.

the heads of the depressed metatarsals, thus removing the strain and preventing impingement on the branches of the digital nerves.

This support is made in a variety of shapes, so as to give the Practipedist the correct appliance for each specific condition. Where there is weakness in the longitudinal arch, as well as the Anterior Metatarsal Arch, Style No. 1 should be used. Where only the

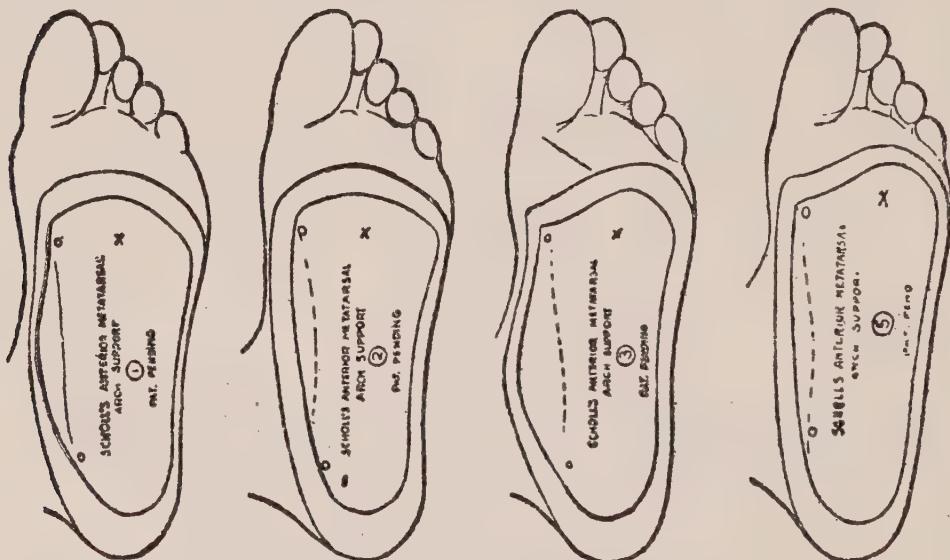


FIG. 43.—Showing four styles of the Anterior Metatarsal Arch Support which have proved correct for Practipedic work. Each style is for a specific purpose.

No. 1. Where the longitudinal arch is weakened as well as the Anterior Metatarsal Arch.

No. 2. Where there is little or no weakness longitudinally, but the trouble is in the Anterior Metatarsal Arch.

No. 3. Where there are severe cramp-like pains in the region of the 3rd, 4th and 5th metatarsal-phalangeal articulation. The plate extends farther forward under the 3rd, 4th and 5th toes.

No. 5. Same as No. 3 without flange.

metatarsal arch is weakened, Style No. 2 (without flange) should be used. Where the sudden cramp-like pains occur in the region of the third and fourth metatarsal-phalangeal articulation, Style No. 3 should be used. This has a flange, and is cut away under the great-toe joint so that the elevation will extend farther under the heads of the metatarsals. The No. 5 (which is the same as the No. 3, but without the flange) is used where no support is needed for the longitudinal arch.

Style No. 4 for slight cases of metatarsalgia, especially adaptable for dancing or tennis shoes.

In ordinary cases of metatarsalgia the elevation may be gradual between the first and fifth toes. In others the elevation should come directly behind the depressed metatarsals.

In cases of severe, cramp-like pains the elevation must be made more acute, forming an oval elevation about half the size of a walnut. Sometimes it is necessary to bring this adjustment farther forward or slightly backward, and frequently several adjustments are necessary to have complete and permanent relief.

In most cases Dr. Scholl's Anterior Metatarsal Arch Support will give immediate relief, alleviating the pains which cannot be relieved in any other way. The patient should be fitted with shoes sufficiently long between the heel and the ball, so as to give a firm support and poise to the foot. Sufficient toe-room is also very important.

Always remove the cause of the disturbance, and see that the patient wears stockings that do not restrict the action of the toes. The Home Treatment, consisting of Soap, Cream and Powder, should always be recommended to build up the circulation and tone up the skin tissues.

PAINFUL HEEL

Pain in the heel is usually caused by a strain of the plantar ligaments and fascia on the sole of the foot where it connects with the Os Calcis. It is not very easily recognized, as no deformity or change in outward appearance takes place.

SYMPTOMS

There is tenderness and pain in the bottom of the heel, a feeling like stone bruise. At times the heels become so sore and tender that the patient is unable to stand. At other times the painful condition occurs only after long and continuous standing or walking,

and is felt mostly in the afternoons or towards evening. In most cases it may be continuous, and there is a malodorous perspiration around the heel.

CAUSES

The cause is usually due to straining and stretching of the plantar fascia where it is attached to the Os Calcis. It is due to flat-foot or weakness or strain on the

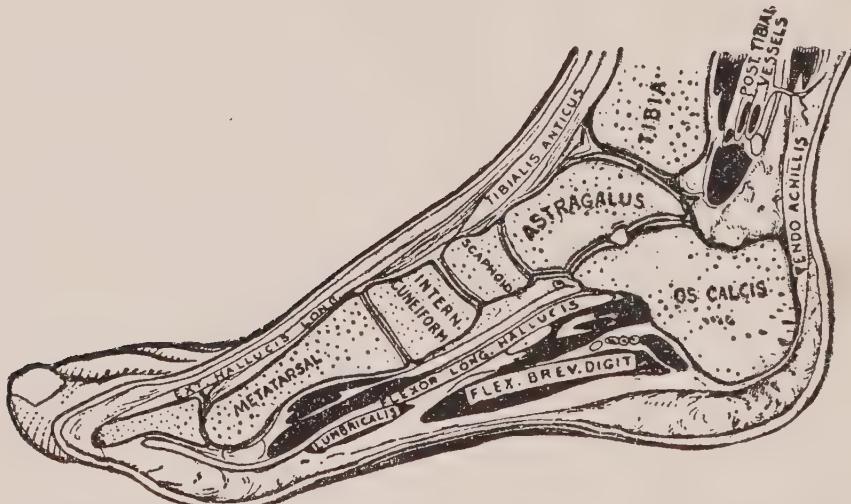


FIG. 44.—Showing outer covering of foot dissected away, so you may see the relationship of the tissues to the framework and the attachment of Achilles tendon to Os Calcis and muscles of the sole attached to heel. Note padding of tissue around heel.

longitudinal arch. In other cases it is due to a spur or bony growth on the Os Calcis.

DIAGNOSIS

By pressing the thumb or finger to the centre of the heel severe pain is at once felt. The customer will complain of aches or pains in the heel, or perhaps tenderness.

PRACTIPEDIC TREATMENT

The pressure from the heel must be removed. This is accomplished by using Dr. Scholl's Tri-Spring or Tru-Span Arch Support and arching it quite high

beneath the Astragalus and posterior region, the object being to remove the pressure from the painful area and, by arching up quite high between the heel and the ball, remove the tension and strain on the ligaments. In case of a spur or bony growth the arch should be elevated quite high, just forward of the painful area,

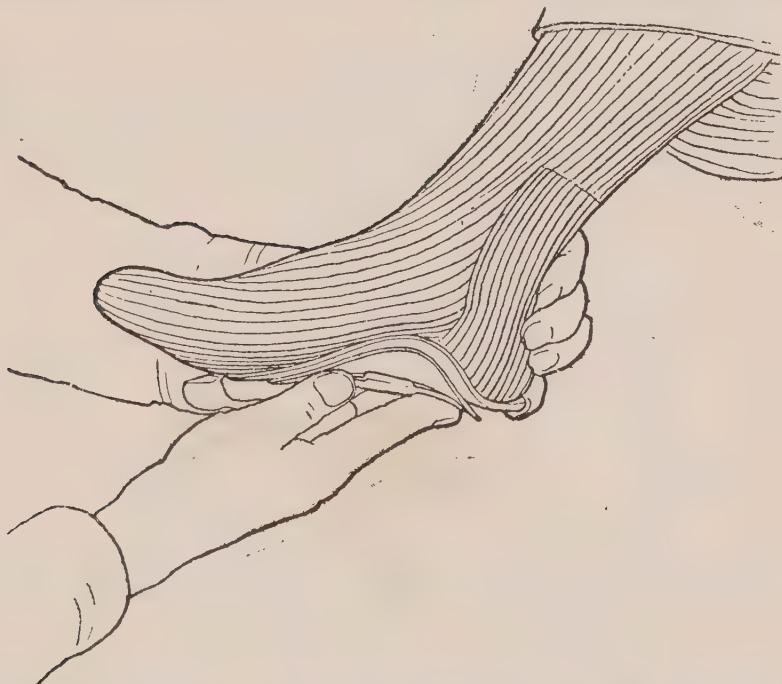


FIG. 45.—Showing the Tri-Spring Arch Support fitted to the foot to relieve the pain and pressure of painful heel. When the arch is fitted the metal under the heel should extend away from the heel of the foot.

so as to prevent the bony formation from pressing into the deeper tissues.

HIGH ARCH OR CONTRACTED FOOT

This condition is known as hollow or contracted foot or Pes Cavus, and is a condition where the longitudinal arches are contracted and extremely high.

SYMPTOMS AND SIGNS

There is a prominence over the instep of the foot. The transverse arch is buckled upward, and one or

more of the bones is prominent, so that when the shoe is being fitted the lacings or buttons cause pain and tenderness. There are callouses on the ball of the foot, and the toes are usually contracted in a hammer-toe condition, with corns on the toes and joints. It is very difficult for the sufferer to obtain shoes that fit well over the instep.

CAUSES

Causes may be traced to paralysis or other diseases that cause contraction of the muscles, while another

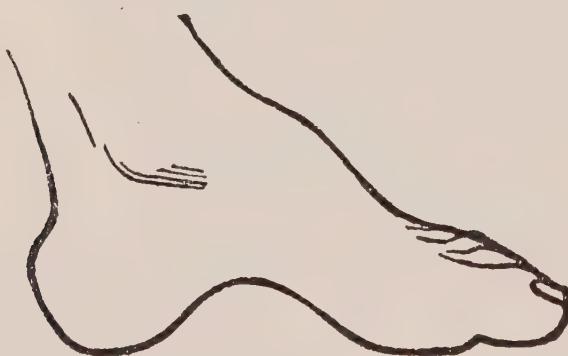


FIG. 46.—Showing an abnormal high arch or contracted foot, also known as Pes Cavus.

cause is that the foot is forced into a shoe too short, causing a breaking up of the arch, which is a reverse of broken-down arch.

DIAGNOSIS

It is not difficult to recognize a case of hollow or contracted foot, as the high, contracted arch is always characteristic of this condition. Callouses and corns on the sole, and contracted toes, with prominent bone projections over the instep, are also noticeable.

PRACTIPEDIC TREATMENT

Dr. Scholl's Tri-Spring Arch Support should be applied and arched very high, so as to meet the high

part of the arch, and in that way distribute the weight between the heel and the ball. This will remove the pressure on the callouses across the ball of the foot and overcome the contraction of the toes.

Where the callouses are very prominent Absorbo Pads or Zino Pads should be applied, and the same treatment should be used for the corns on the toes.

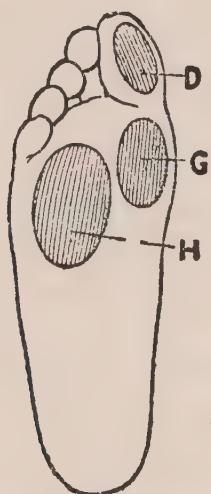


FIG. 47.—Manner in which different sizes of Absorbo Pads are applied to the foot to relieve pressure on the callouses.

DR. SCHOLL'S

Latest Scientific Arch Supports

A SERIES of Dr. Scholl's improved metatarsal appliances, based on many years' experience, are now available for treating what is the most common and painful of foot disturbances.

They can be substituted for Style 1, 2, 3 and 5, and are made in shoe sizes, wide and narrow, in the following qualities:—

"Kiropedic" . . .	Styles 11, 12, 13 and 15
"Osteopathic" . . .	,, 11, 12, 13 and 15
"Legerine" . . .	,, 11, 12, 13 and 15
"Medical" . . .	,, 11, 12, 13 and 15
"Surgical" . . .	,, 11, 12, 13 and 15

When added strength is required for more pronounced cases of foot disturbances any of the above-mentioned appliances can be reinforced with a brace.

Dr. Scholl's "Durolite" Support is made in Styles Nos. 1, 2, 3 and 5.

REVIEW QUESTIONS FOR LESSON NO. 4

TO THE STUDENT

Great care should have been taken over this lesson. You will find in your practical work a large percentage of people having the conditions as described in this lesson. If you have mastered it thoroughly you will be able to make splendid use of your knowledge in relieving the conditions.

It is the desire of the School that every student should become an expert in Practipedics. The final examination will contain several questions on this lesson.

- (1) Where is the anterior metatarsal arch located?
- (2) What is the position of the metatarsal heads in the case of Metatarsalgia?
- (3) What is Morton's Toe and Metatarsalgia?
- (4) What is one of the principal symptoms of Metatarsalgia?
- (5) How would you recognize a case of Metatarsalgia?
- (6) What is the treatment?
- (7) How is it applied?
- (8) What is painful heel?
- (9) What is the treatment?
- (10) What will you find in a case of abnormal high arch or contracted foot?
- (11) How would you give relief?

LESSON No. 5

LESSON No. 5

FITTING PRACTIPEDIC APPLIANCE

THE student by this time realizes the folly of attempting to relieve abnormal conditions of the feet without individually fitting the corrective appliances to each



FIG. 48.—Showing how Arch Support is fitted to the patient.

and every case. The very thought of selling appliances for correction of foot disorders without fitting them

individually is against all principles and contrary to the ethics of Practipedics.

By personally fitting the appliances to the individual foot you obtain the full confidence of the patient; you can give immediate relief, provide comfort, and are able permanently to correct the cause.

To accomplish this the foot must be examined, weaknesses and structural disturbances noted, and the most



FIG. 49.—This shows a usual case of Flat-foot with Hallux Valgus. This is distinguished by the elongated heel, and in such cases the heel seat of the appliance should be elongated to extend flush with the heel and arched farther forward to reach the high point of the arch.

corrective remedial foot appliance selected. To adjust the foot appliances Dr. Scholl's Arch Fitter must be used. With this apparatus the Practipedist can adjust the appliances to meet the specific needs of each foot.

HOW SIZED

All of Dr. Scholl's appliances are accurately sized so that you may use the leather covering piece as your basis, having the heel part flush with the heel and the forward skived part reaching up to the first metatarsal-phalangeal joint. They should not extend over or under to any extent.

If you are adjusting for weak flexible foot with a very high arch, it is necessary to select a trifle longer appliance in order to give the desired length after it has been shortened by elevation.

Now that you have the length, and have decided upon the style of appliance needed in the particular

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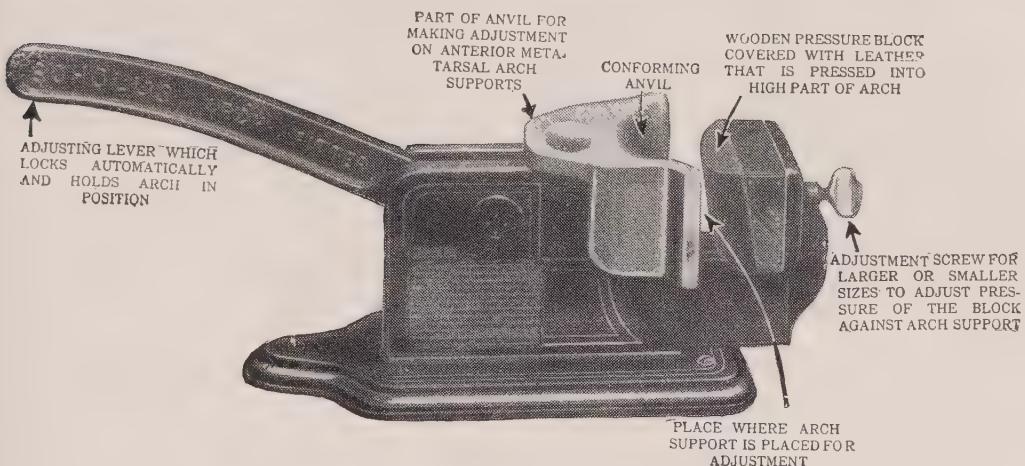
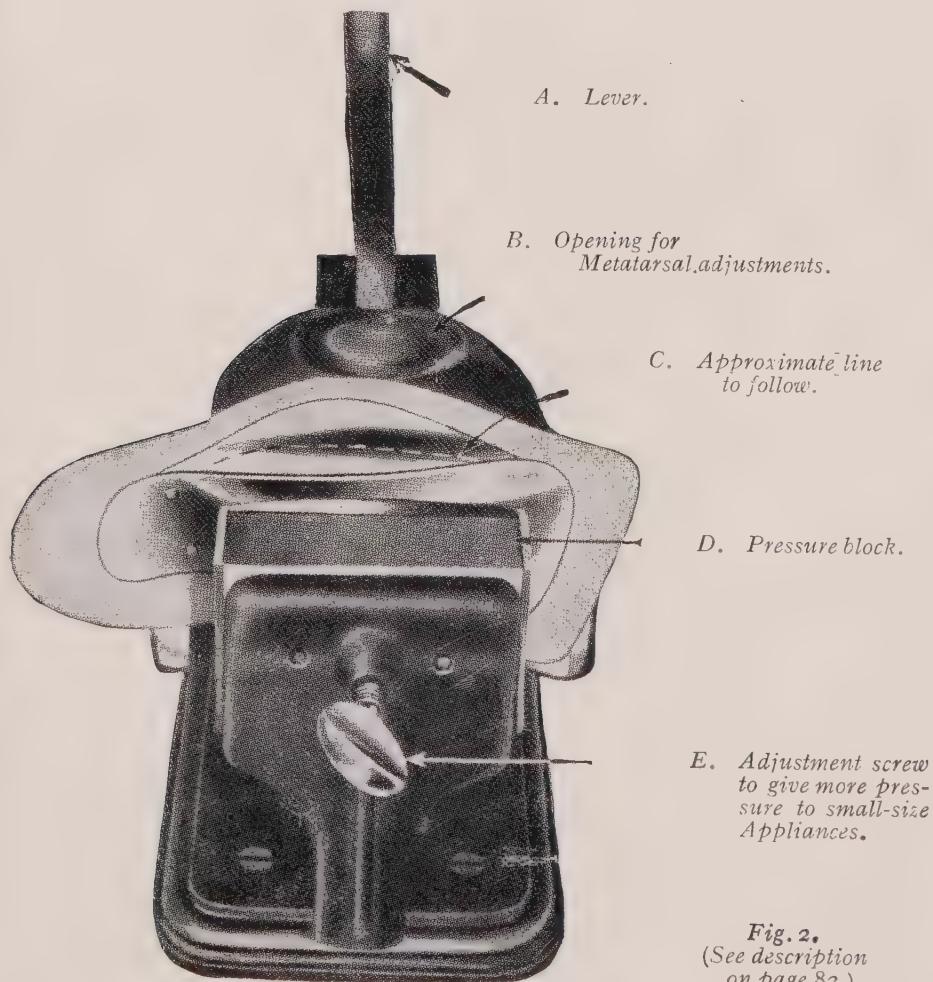


Fig. 1.—This is the apparatus essential in fitting appliances. Student will observe the different parts so as to be familiar with same.



*Fig. 2.
(See description
on page 82.)*

HOW TO USE THE ARCH FITTER

Fig. 2.—First place the support in position between the steel anvil or conformer and the leather-covered wooden pressure block. If it is a large size, the adjusting thumb-screw "E" can be turned out so as to leave ample space between the conforming anvil and the wooden pressure block. Then raise the lever "A" until it automatically locks, which will then hold the support securely in position with a vice-like hold. If it does not hold the support firmly, then release lever and make a few more turns to the right of the adjustment screw, which will force the pressure block in, giving more pressure against the support.

When a general increased elevation is desired for the arch of the foot, then with the mallet tap the metal of the support along the dotted line "C."

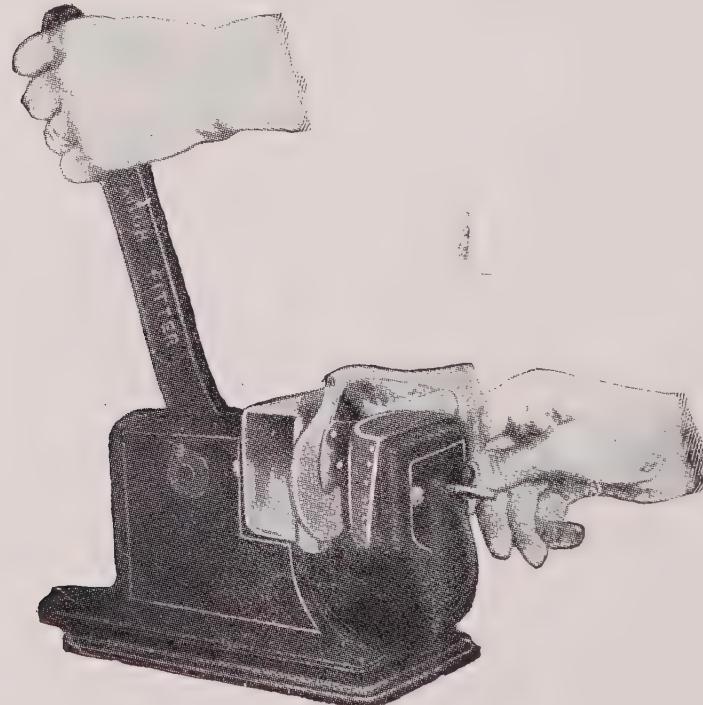


Fig. 3.—Placing Foot Support in position so that pressure can be brought at the highest point where it is needed.

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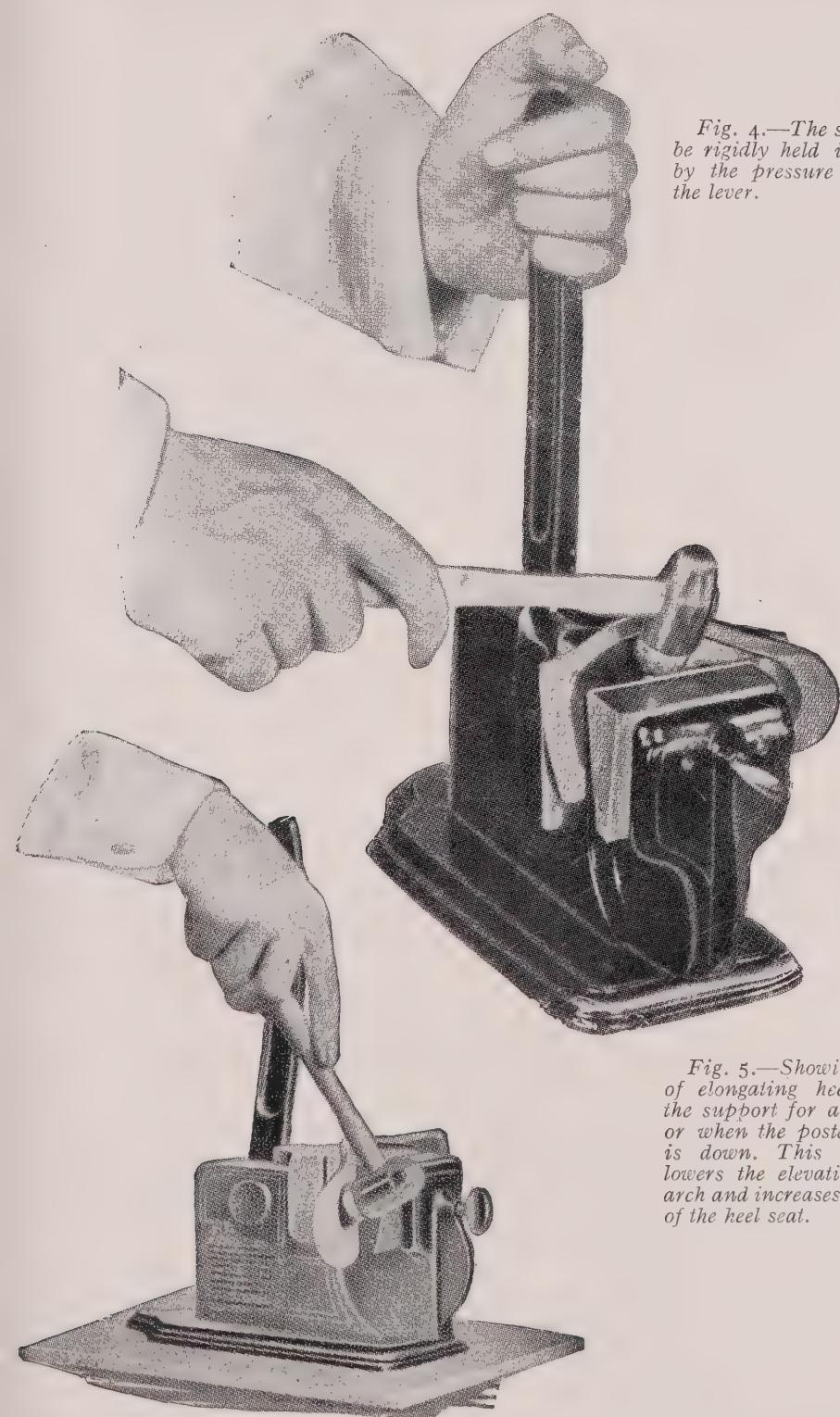


Fig. 4.—The support can be rigidly held in position by the pressure exerted on the lever.

Fig. 5.—Showing method of elongating heel seat of the support for a long heel or when the posterior arch is down. This operation lowers the elevation of the arch and increases the length of the heel seat.

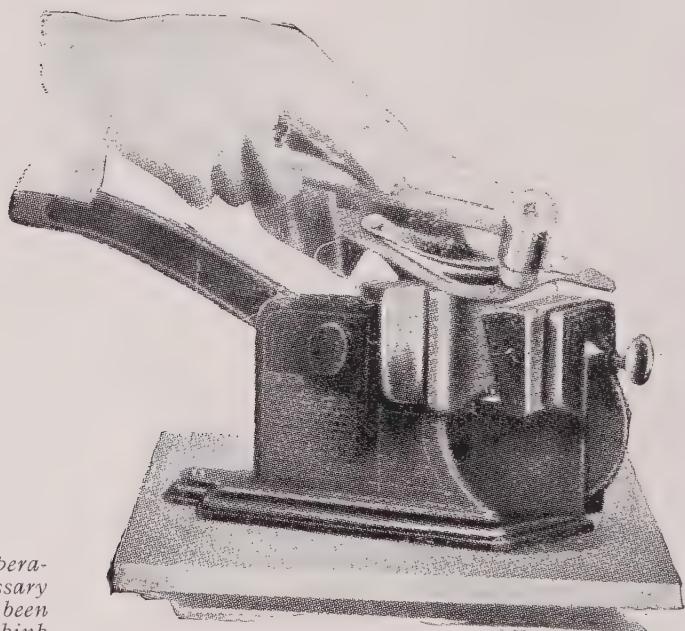


Fig. 6.—This operation is only necessary where the support has been lowered, and a slight kink or depression is left in the flange. Students will note that the edges of the flange which lie against the foot and the lining of the shoe should be smooth.

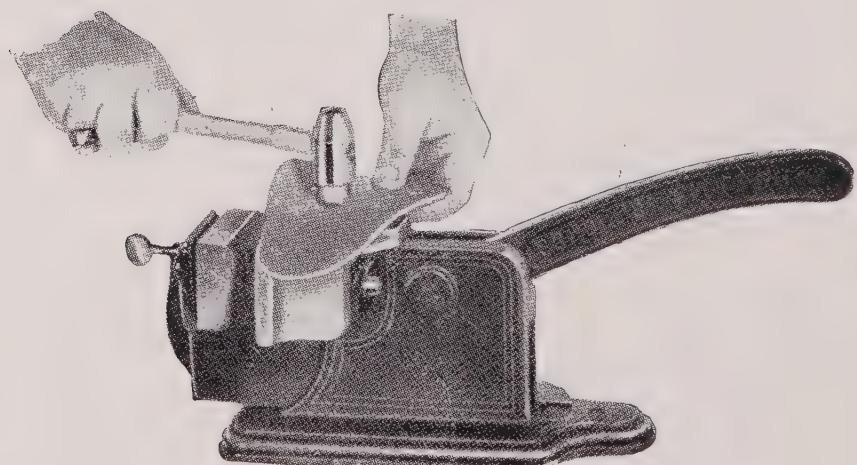


Fig. 7.—To lower the Foot-Easer or Support place it metal side down on the top of the anvil, and gently tap it on the leather surface with the hammer. Hard blows should not be struck as these affect the leather.



Fig. 8.—The support when placed in position should fit at all points of the arch flush from the heel to the metatarsal-phalangeal articulation of the great-toe joint. All of Dr. Scholl's appliances are based on this fitting.



Fig. 9.—Showing Dr. Scholl's Anterior Metatarsal Arch Support and the area where elevation should be made to support the depressed metatarsal head or heads.

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Fig. 10.—Finger pointing to the opening in the anvil which is especially constructed so that the forward section of the Anterior Metatarsal Arch Support can be elevated.

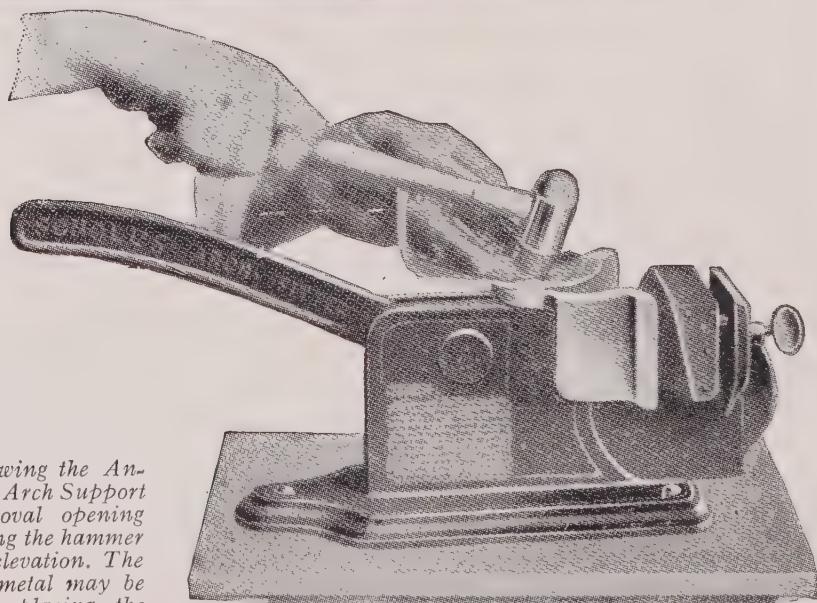
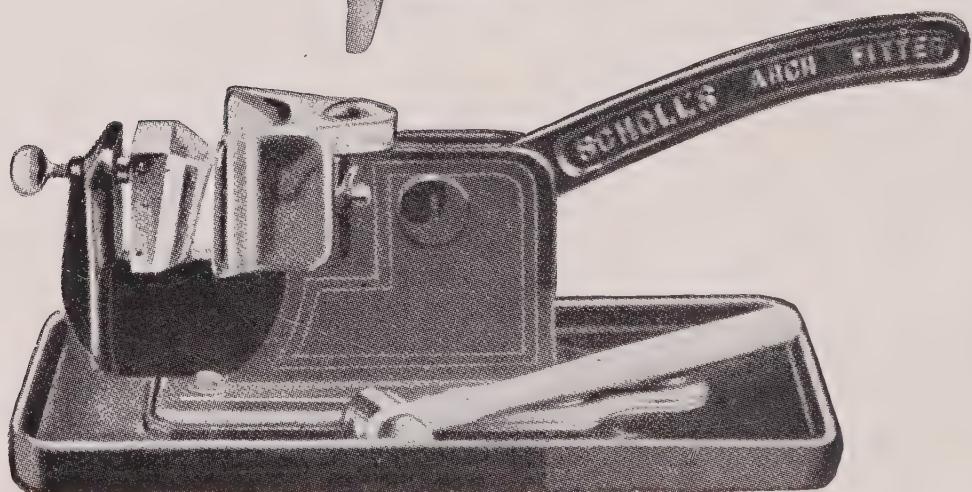


Fig. 11.—Showing the Anterior Metatarsal Arch Support placed over the oval opening in the anvil, using the hammer in making the elevation. The elevation in the metal may be made by simply placing the support over the oval opening.

The Practipedist should always use a raw hide-faced hammer or wooden mallet. Steel hammers will mar the support, and will also leave sharp edges and dents which will induce breakage. The tapping should be done gently. Heavy pounding is not necessary.

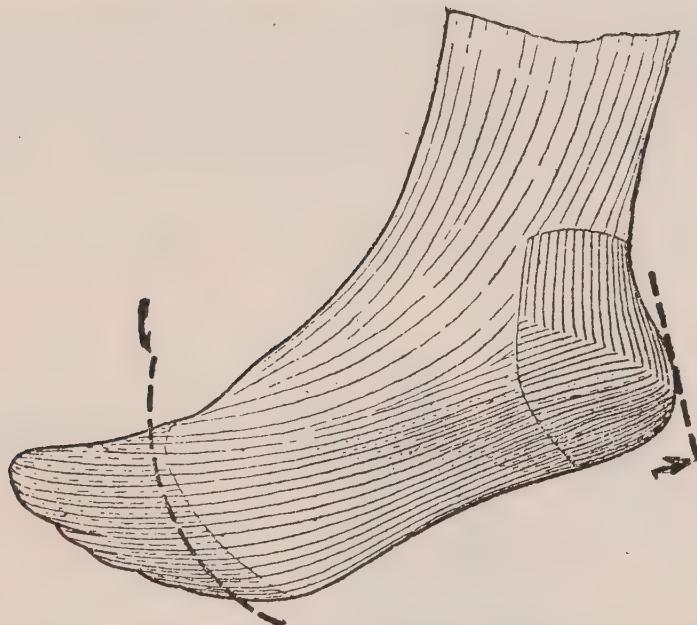


FIG. 50.—The dotted line shows the proper way of determining the correct size Foot-Easer or Arch Support independent of shoe size, and the patient should be fitted between these two points. It is important always to have the leather flush with the rounded portion of the heel and the skived part forward to the bend of the great toe.

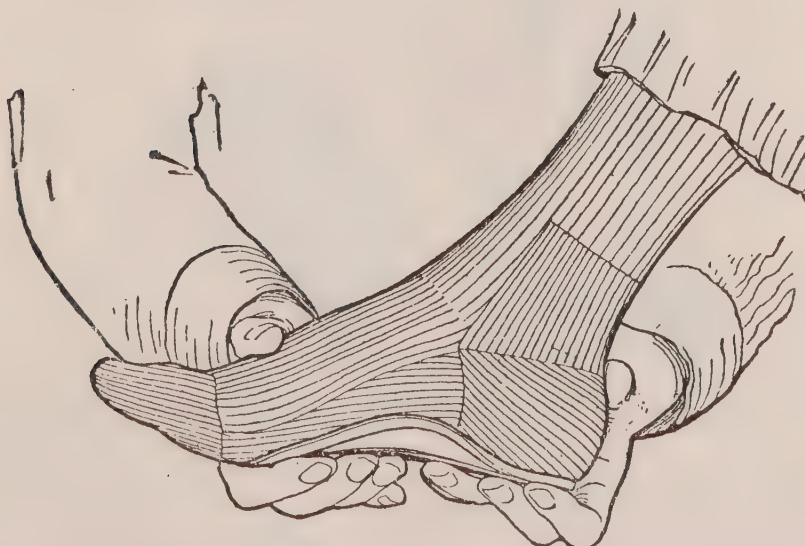


FIG. 51.—After the correct length is obtained, and when the fitting is completed, it should fit smoothly and evenly at all points. If it is fitted in this manner it will be comfortable to the patient.

case, make the adjustment, either higher or lower, on the arch fitter to meet the contour of the relaxed foot. The support can be elevated by placing it between the wooden pressure block and the steel conformer and gently tapping it with the mallet.

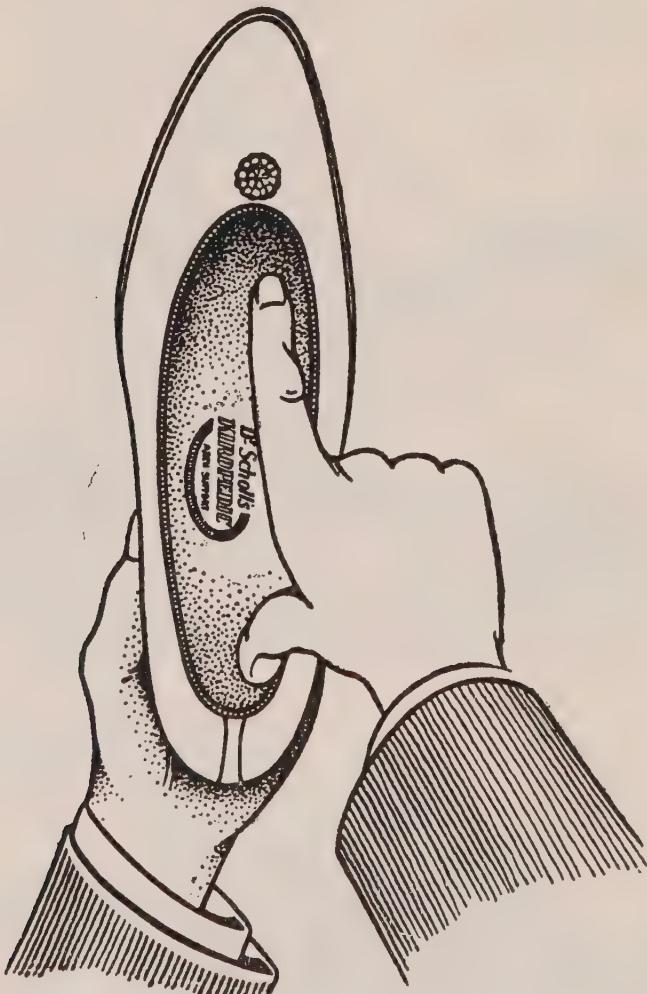


FIG. 52.—With appliance placed in shoe and testing with finger and thumb to set it fitted so as not to rock or shift.

If the heel of the foot is somewhat elongated, then elongate the heel part of the appliance, so that when the fitting has been done the appliance fits smoothly and perfectly to all points of the arch. In fitting the Anterior Metatarsal Arch the elevation can be done on

the anvil of the conforming block by placing it over the opening and gently tapping it with the mallet.

It is not necessary to hit hard or do much hammering on these appliances. Dr. Scholl's appliances are all carefully constructed and formed to an approximate normal height and shape so that there is only slight adjustment needed in either raising or lowering, and

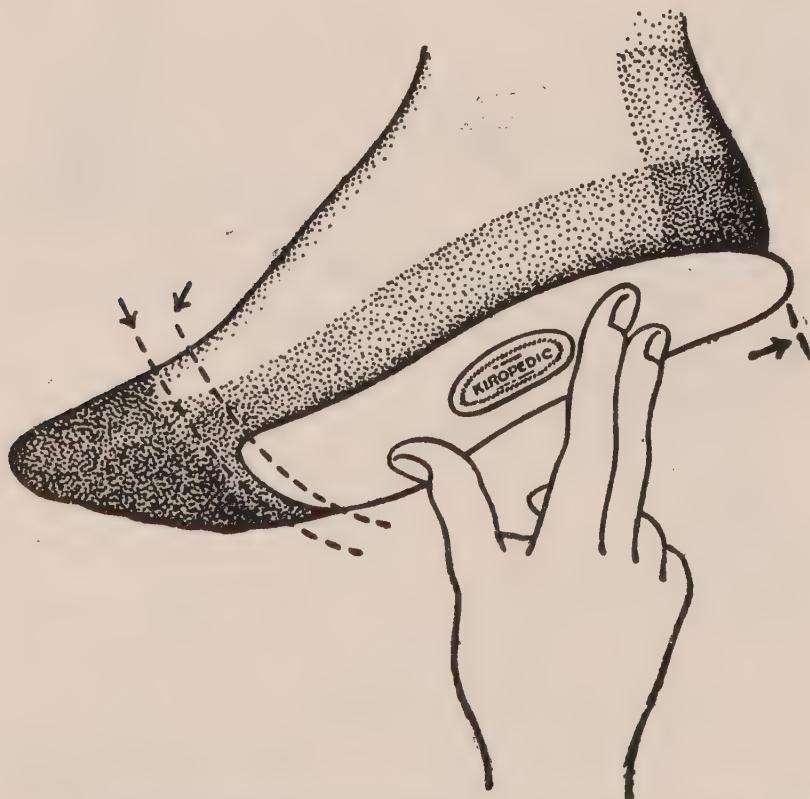


FIG. 53.—Showing the Foot-Eazer, applied to the foot, that is too long.

it is best to make these adjustments by small degrees, so as not to destroy the original lines put in the appliances.

After the appliance is fitted to the foot, place it in the shoe, and be sure that you have the right width so that it does not extend out and become noticeable when the shoe is on the foot. Much care should be taken to see that the front part of the support sets firmly into the ball part of the shoe, and that the heel

part of the supporting plate sets firmly down into the heel of the shoe. Otherwise there will be a rocking motion or a sensation that the heel is slipping and is being forced out of the heel of the shoe (see Fig. 52).

In that event remove the appliance and arch the

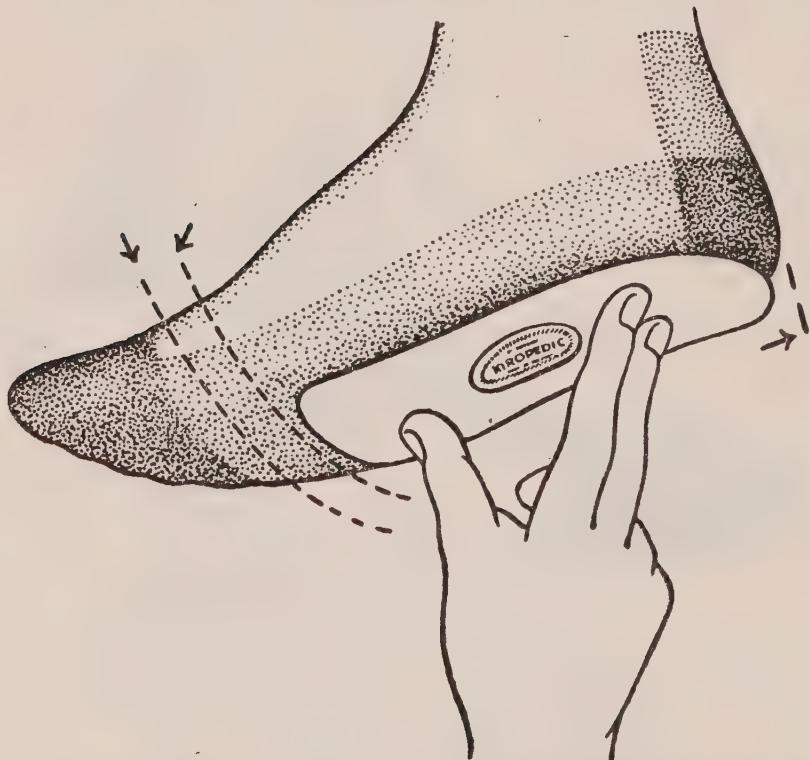


FIG. 54.—Showing Arch Support, placed to the foot, that is too short.

support a trifle higher under the heel. Slightly bend the metal downward, away from the leather top piece, and then place back into the shoe and test with the thumb on the heel part and the index finger forward, holding the shoe with the left hand to see if it sets firmly without any rocking or tilting.

This particularly applies to the fitting of Foot-Easers or other appliances to ladies' high-heel shoes, and in low-heel shoes, pumps, slippers, etc.



FIG. 55.—Showing Foot Support, fitted to the foot, with pressure upon it.

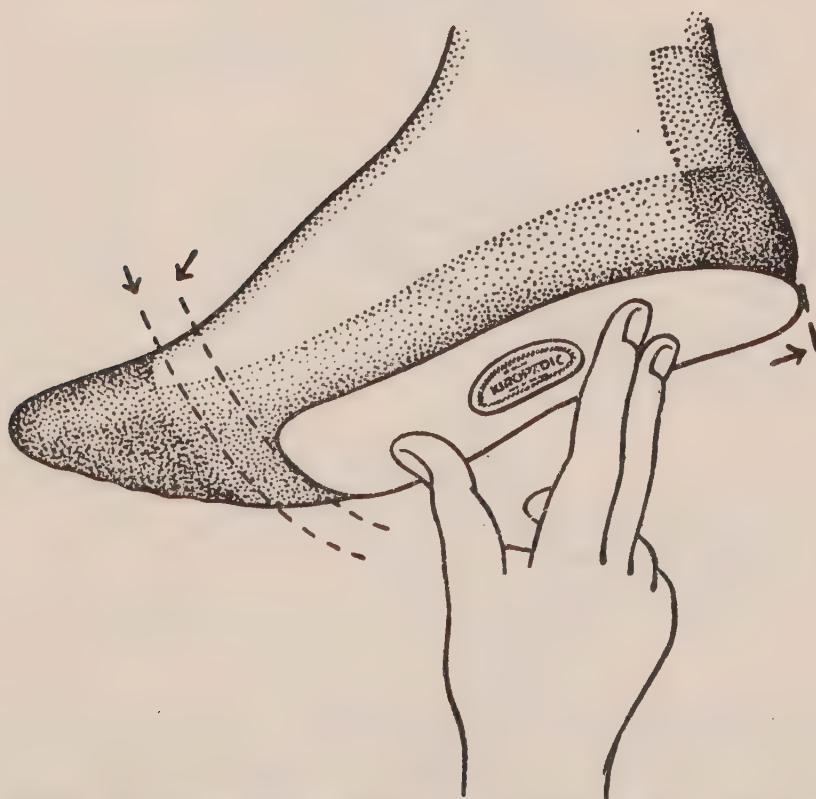
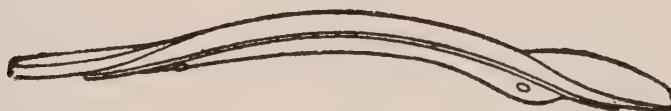


Fig. 56.—Showing Kiropedic Arch Support, fitted to the foot, of correct length and size.

FITTING THE SHOE AS WELL AS THE FOOT

The student must thoroughly understand that different types of shoes require different adjustments, even though



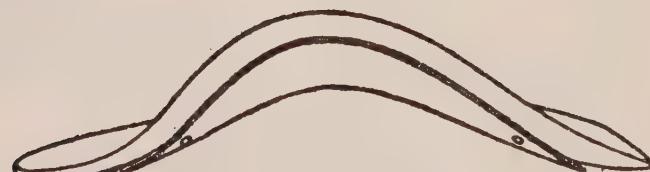
(A) The arch has been lowered to give but very slight pressure.



(B) Slight elevation and elongated heel.



(C) Moderate arch.



(D) High arch.

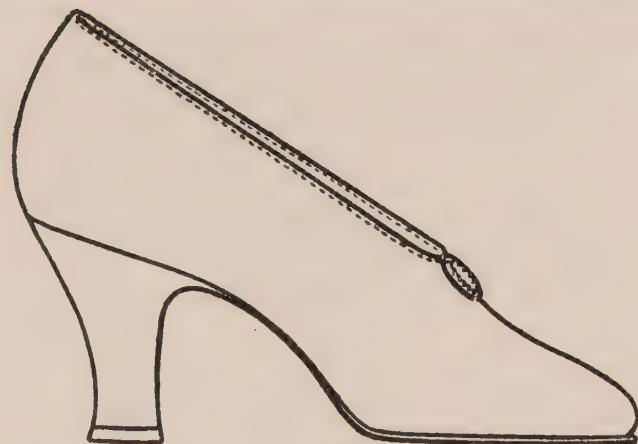


(E) High arch and elongated heel seat.

FIG. 57.—Showing different adjustments of Arch Supports.

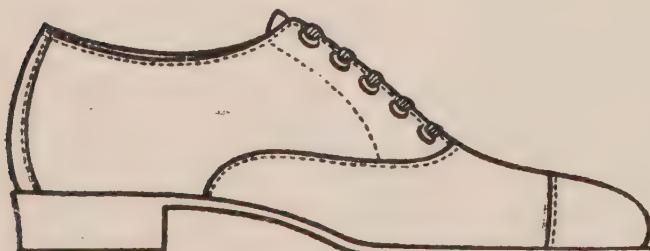
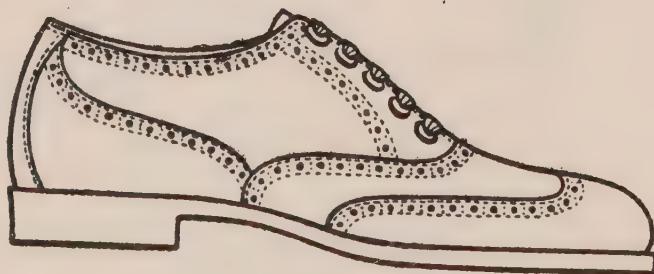
the appliances are properly fitted to the foot. The poise of the foot is changed in a high-heel shoe, and therefore that must be taken into consideration so that the foot is properly supported in the position it

(A) Showing ladies' wooden heeled pump. In fitting for this shoe great care must be taken so that the heel part of the support sets firmly into the heel seat of the shoe.



(B) A model showing a moderately high heel.

(C) Showing a golf shoe. A different adjustment must be made to obtain the same amount of correction to the foot when a person wears this style of shoe.



(D) Shows ordinary man's shoe.

Students will note that these different types of shoes require different adjustments, and the customer should be so informed when the appliances are fitted.

FIG. 58.—Showing the different styles of shoes. Each of these styles requires a different adjustment to give the same correction to the foot.

will assume in the shoe. This requires the Practipedist to adjust the appliances to different types of shoes.

If the patient wears a high-heel shoe for street and dress wear, the support should be fitted for that particular type of shoe. Allowance, of course, can be made for a slight variation of one-sixteenth to one-fourth inch in the height of the heel.

If the patient, however, wears low-heel shoes, such as tennis or golf shoes, then the support should be fitted specially to that type. A support that fits the foot properly in a low-heel shoe will not give satisfactory



FIG. 59.—Showing case of Hallux Valgus with weak foot.

service in a high-heel shoe, that being one of the principal causes of slipping at the heel.

Do your fitting neatly, and do not leave projections or depressions in the metal.

Listen to what the customer has to say, and get him to tell you if the support feels high or presses too much at any one point, and then make adjustments accordingly. Dr. Scholl's Appliances can be worn in any shoe. Being scientifically and neatly constructed they can be worn in the modern-style footwear.

The latest styles of Dr. Scholl's Appliances, being made in single sizes, permit of finer adjustment and can be worn in the most fashionable shoes.



FIG. 60.—Showing X-ray photograph of position of bones with Hallux Valgus.



FIG. 61.—The usual appearance of boots or shoes in cases of Hallux Valgus or Bunion.

BUNIONS AND HALLUX VALGUS

An enlargement of the joint at the base of the great toe is popularly termed a bunion. This, however, is not correct, as this enlargement can be caused by different conditions. A bunion, strictly speaking, is an inflammation of the bursa at the great-toe joint, causing swelling, redness and pain. Hallux Valgus is a condition where the bones of the great toe are forced outward, causing

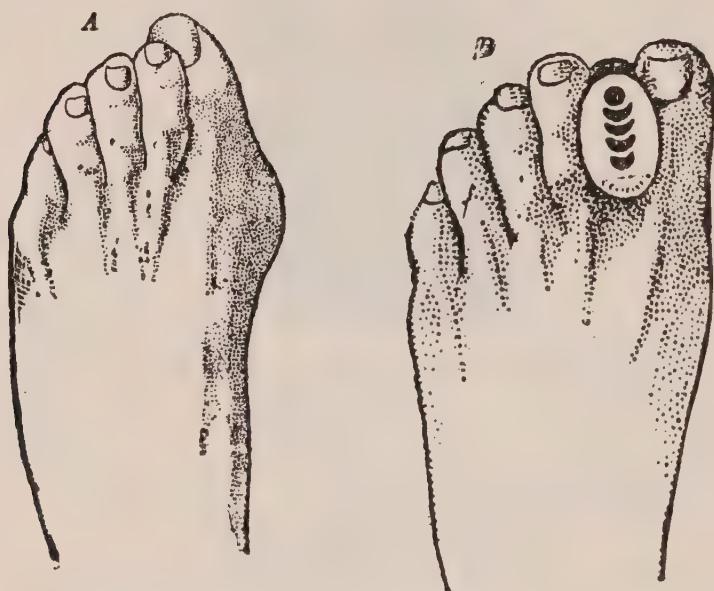


FIG. 62.—(A) Showing bunion with underlapping great toe. (B) Showing same foot. Toe Flex in position, restoring toe to its normal position.

a slight or partial distortion of the metatarsal-phalangeal joint. This condition is often associated with a localized inflammation.

SYMPTOMS

Bunions and Hallux Valgus are formed gradually. The symptoms of the early stages are burning, tenderness and pain on pressure at the great-toe joint; later it becomes swollen, red, inflamed, and extremely sensitive to touch. The customer will complain of pain and swelling after walking, and where the toe is bent outward there is a large prominent joint present. The

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great toe underlaps or overlaps the other toes, causing considerable pain.

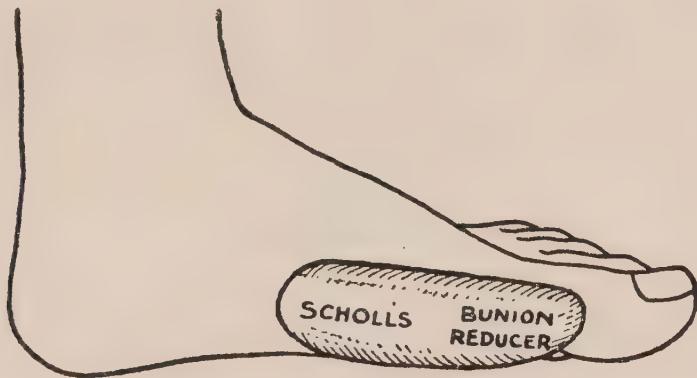


FIG. 63.—Showing Bunion Reducer, a rubber shield moulded to fix over the enlarged great-toe joint.

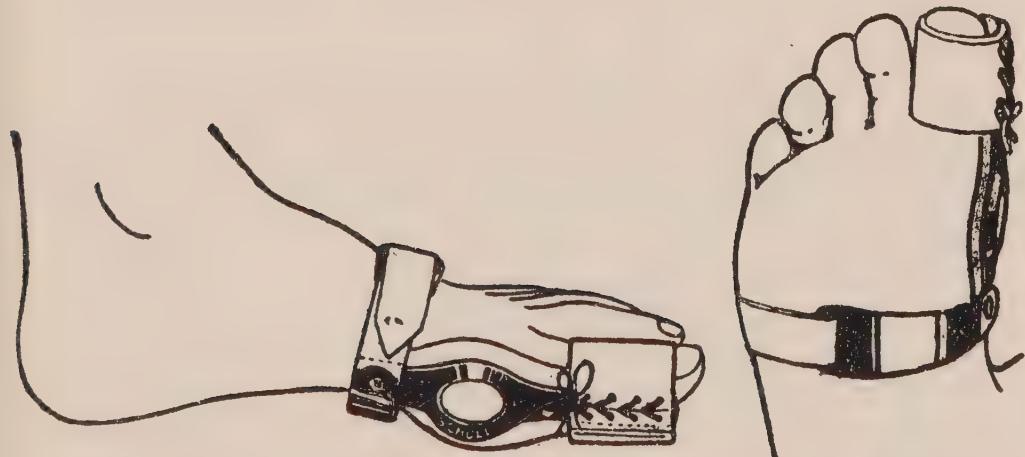


FIG. 64.—Improved Bunion Spring applied to the foot. (A) Lateral view. (B) Bottom view. This spring acts as a lever in drawing the great toe to its normal position. This is for night wear.

Corns and callouses sometimes form, which cause additional local pains.

CAUSES

This condition is caused by short and pointed-toe shoes and pointed-toe stockings, which force the bones

of the toes into an abnormal shape. Other causes are foot weakness, in either the longitudinal or Anterior Metatarsal Arch. Where the longitudinal arch is weakened, abnormal weight is thrown on the great-toe joint, causing undue pressure and pain; the foot is elongated and forced down into the toe of the shoe, making the shoe too short.

DIAGNOSIS

Diagnosis of Bunions, or Hallux Valgus, and enlarged toe joints is very simple, owing to their outward appearance. The enlarged toe-joint conditions are very numerous and are easily recognized by the Practipedist. Examination should be made of the foot to see if the joint is flexible and if the inflammation is acute.

PRACTIPEDIC TREATMENT

The first thing to do is to remove the cause. The hosiery worn should permit of free movement of all the toes. Be particular that the shoe is of sufficient length and width. If the toe is flexible Dr. Scholl's Toe Flex should be worn, bringing the toe to a straight line. When there is swelling and enlargement, apply Dr. Scholl's Bunion Reducer, a rubber moulded shield or pad that fits snugly over the joint, with a thickened shoulder back of the bunion to remove shoe pressure and irritation. The Bunion Reducer has a counter-irritant effect, so that the superfluous tissue cells may be carried away in the circulation. The Reducer also fills out the hollow places and prevents the shoe from being bulged out of shape.

Dr. Scholl's Bunion Spring is to be applied for night wear. This acts as a lever in bringing the great-toe joint over to its naturally straight line and should be worn every night.

To relieve pain and assist in restoring normal conditions Dr. Scholl's Wenal Ointment should be used.

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In cases of inflammation Dr. Scholl's Bunion Lotion should be applied.

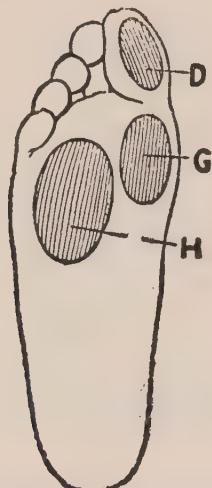


FIG. 64A.—Manner in which different sizes of Absorbo Pads are applied to the foot to relieve pressure on the callouses.

When there is a tendency to weak or flat-foot the most suitable Dr. Scholl's Foot Support should be fitted. This bridges the weight from the heel to the ball, taking the pressure and strain from the enlarged toe joint.

HAMMER-TOE

Hammer-toe consists of a drawing back or contraction of the toe at the medial phalanx; it rarely affects the great toe, but is more frequently found on the second, third, fourth and fifth toes. It may be caused by wearing short and narrow pointed-toe shoes or by a contraction due to breaking down of the anterior metatarsal arch of the foot.

PRACTIPEDIC CORRECTION

It is necessary to ascertain the cause of the condition and, when due to faulty shoes, correctly fitted, broad-toe shoes should be fitted. The anterior metatarsal arch should be inspected and, if depressed, Dr. Scholl's Anterior Metatarsal Arch Support, No. 2 or No. 5,

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or Lastik Meta-Pad, should be applied. For straightening the contracted toe Dr. Scholl's Hammer-Toe Spring, style A or B or C, can be applied.

Cases of long standing should be referred to a doctor.



FIG. 65.—Showing Dr. Scholl's Hammer-Toe Spring applied to the foot.

PAINFUL GREAT TOE

A term applied to a condition of pain in the first metatarsal-phalangeal joint of the great toe. Fre-

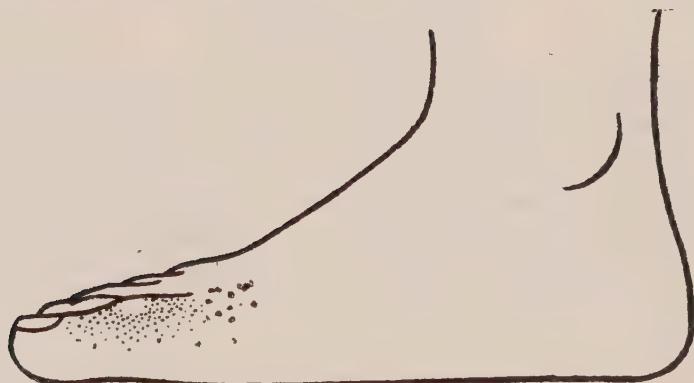


FIG. 66.—Painful great toe. This is sometimes caused by exostosis, bunion and flat-foot.

quently there is stiffness in the joint, and it is held in a more or less rigid position. Movement is oftentimes accompanied by an aching pain. In more advanced

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cases the joint becomes quite stiff and swollen and a bony thickening develops.

CAUSES

Generally attributed to weak and flat-foot condition. Short and improperly fitted footwear as well as accidents are contributory factors.

TREATMENT

If the weakened condition of the foot is corrected by fitting Dr. Scholl's "Foot-Easer" the great-toe joint is relieved of pressure and responds to local application of Dr. Scholl's Wenal Ointment and massage treatment.

WEAK ANKLES

Weak ankles are an indication of weak arch and should be treated in the same manner as a weak-arch condition.



FIG. 67.—Dr. Scholl's Lastik Anklet applied to foot.

The weak ankle can be given additional support by applying Dr. Scholl's Lastik Anklets. They are made of finely woven elastic, to give support to the under arch as well as side-support to the ankle. They are also useful for sprains or varicose conditions.

HARD CORNS

Corns are layers of dead epithelial tissue caused by injury or pressure. Nature piles up these cells to protect



FIG. 68.—Showing hard corns on the toes and little-toe joint.

the underlying tissues from injury until the false or dead tissue becomes thickened into a conical mass, pressing down into the cutaneous nerve branches and causing pain.

They are very painful and sometimes become highly inflamed and swollen.

TREATMENT

First remove the cause. If the shoe is too narrow or short, fit the proper size. When the corns are caused by the foot sliding down into the shoe, apply a

Dr. Scholl's Foot Support to hold firmly the foot back into the heel of the shoe. This removes the pressure on the corns. To give relief apply Dr. Scholl's Zino Pads.

For medicinal treatment Dr. Scholl's Corn Salve should be used in conjunction with Dr. Scholl's Zino Pads. This combined treatment is most effective. For



FIG. 69. Showing how Dr. Scholl's Zino Pads are applied to the toes.

very hard corns of old standing Dr. Scholl's Fixo Plasters will give rapid results. Dr. Scholl's Zino Pads should then be used to protect the new skin from friction and pressure.

Dr. Scholl's Absorbo Pads, made of surgical rubber in various shapes, are of especial use for corns on contracted toes and any other parts of the foot subjected to great pressure and continual friction.

Corns should not be cut or trimmed, except by an expert chiropodist where all aseptic precautions are carefully observed.

SOFT CORNS

These are caused by abnormal pressure, and in most instances are found where there is a weakened con-

dition in the anterior metatarsal arch. The bones rub together and set up an irritation and an inflammation.



Fig. 70.—Showing Toe Right placed in position to separate the toes.

Pointed-toe shoes and stockings are other causes.

PRACTIPEDIC TREATMENT

First remove the cause. If there is any weakness in the anterior metatarsal arch apply Dr. Scholl's

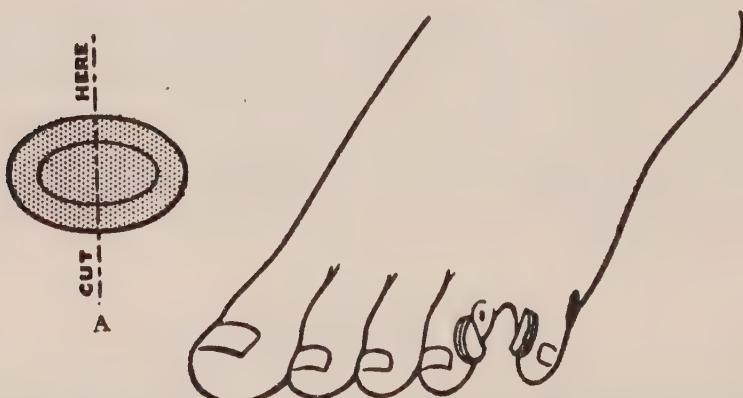


FIG. 71.—(A) Showing how Zino Pad (corn size) is cut through centre and applied to take pressure off soft corn between the toes.

Anterior Metatarsal Arch Support, Nos. 1, 2 or 5, properly fitted to bring correction to the depressed metatarsal heads.

Soft corns are very irritating and become extremely painful.

The feet should be thoroughly bathed with Dr. Scholl's Foot Soap, rubbing it well between the toes to remove any dead tissue. Dr. Scholl's "2 Drop" Corn Remedy can then be applied to the soft corn, and protected by cutting a Zino-Corn pad through the centre and applying one-half on the inside of each toe. The pad can be cut and put together, making it double if more separation is required.

CALLOUSES ON THE SOLE

Callouses forming on the different parts of the foot are an indication of an underlying cause. Bone displace-



FIG. 72.—Callouses on sole of the foot.

ments, such as the depression of the metatarsal heads, are other causes.

A callous is the result of Nature's attempt to protect the underlying tissues from injury, and when trimmed off or cut away fresh callouses will form, as they are there for the purpose of attempting to protect the thin and underlying tissues from the abnormal pressure and friction.

PRACTIPEDIC CORRECTION

Ascertain the cause of the callouses and fit the proper corrective appliances to relieve the condition. The hard callous is quickly and painlessly removed by applying Dr. Scholl's Callous Salve and placing over it Dr. Scholl's Zino Pad (callous size); then apply Dr. Scholl's Anterior Metatarsal Supports of the correct style and adjust them to remove the pressure from the affected area.

For callouses on the heel apply Dr. Scholl's Callous Salve and place over it Dr. Scholl's Zino Pad; then fit Dr. Scholl's Foot Support to prevent further pressure.

CHILBLAINS

Chilblains are due to having exposed the feet to extreme cold and then suddenly bringing them in contact with heat. Chilblains also follow frost-bite. It is recognized by a sensation of itching and burning, and then followed by a continuous aching. The parts appear red and swollen, and usually occur after each exposure to cold.

PRACTIPEDIC CORRECTION

Apply Dr. Scholl's Chilblain Lotion. This relieves the itching and burning. The parts should be thoroughly massaged with Dr. Scholl's Foot Cream so as to improve the circulation in the feet. Roomy shoes should be worn, with uppers of soft leather so as not to irritate the inflamed area.

EXCESSIVE PERSPIRATION

When the foot throws off a bad odour it is due to the secretions in the pores of the skin. This causes an unhealthy state and inactivity of the skin glands.

It may not be due to uncleanliness, but may be brought about by such abnormal conditions as foot strain, by improper footwear and hosiery. Occasionally it is due to systemic origin.

PRACTIPEDIC CORRECTION

First make examination to ascertain if there is any foot weakness or arch trouble. If so, fit with Dr. Scholl's Foot-Eazer or other appliance that is indicated. Next, recommend the general home treatment—Dr. Scholl's Pedico Foot Soap, Cream and Powder. Immerse the feet in warm water for about ten minutes. Then apply a generous quantity of the Pedico Foot Soap and massage thoroughly for a few minutes. Then carefully rinse off with a cooler water, dry thoroughly, and then massage with the Foot Cream. Always keep the feet dusted with antiseptic powder. Shake the powder into the shoes and stockings. The stockings should be changed daily. It is advisable to change the shoes and wear them alternately, using shoe-trees to keep them in shape.

BROMIDROSIS

Bromidrosis is an abnormal condition of the skin and affects the feet and other parts of the body. It is usually accompanied by an excessive amount of perspiration and oftentimes blanches the skin, especially the soles of the feet, around the heels and between the toes. In this condition the pores of the skin are in an unhealthy state. In some cases there is a scanty amount of perspiration, but in every case it calls for the application of a strong deodorizer and additional

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treatment that will destroy the bacteria producing this strong odour.

Dr. Scholl's Bromidrosis Powder should be recommended in every case for the correction of any Bromidrosis condition. The feet should be carefully bathed



FIG. 73.—How Bromidrosis powder is sprinkled over the foot and toes.

and dried and the powder well shaken over the feet, between the toes and over the soles. This treatment should be repeated morning and night. Many complaints against the wearing quality of shoes and hosiery might be prevented if sufferers use this treatment.

INGROWING AND ABNORMAL TOE NAILS

Ingrowing toe nails consist of a section of the nail becoming inverted into the soft tissue of the nail groove.

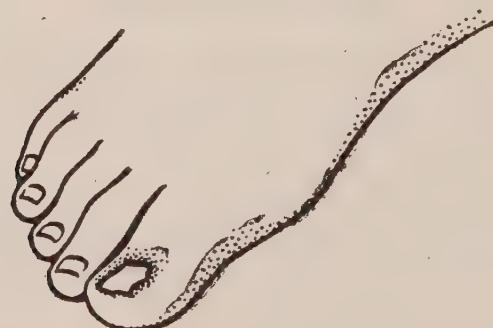


FIG. 74.—A bad case of ingrowing nail.

This sets up an irritation and inflammation, and finally a pus or ulcerous formation. It is caused by short shoes, by injudicious trimming of the nails, by pointed-toe stockings and by infection.

PRACTIPEDIC CORRECTION

First remove the cause. If the shoes are too short and the stockings are pointed and cause pressure on

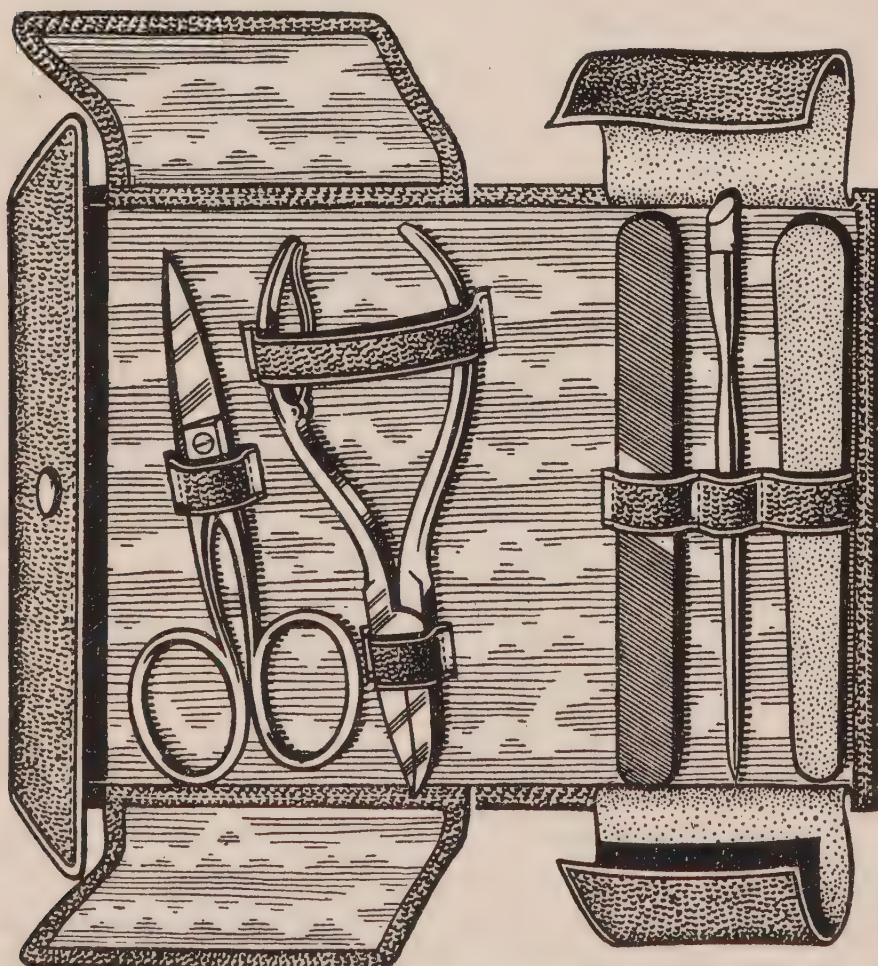


FIG. 75.—Toe-nail and Pedicure Case.

the toe, correct this. First bathe the feet with hot water and Dr. Scholl's Pedico Soap, then dry the feet.

The toe should be kept bandaged, and all irritation and pressure from the shoe removed. If it is a case of infection or splintered (bifurcated) nail, a competent chiropodist or doctor should be consulted. Examine the foot for probable cause, such as elongation, and fit suitable remedial support.

TRIMMING THE TOE NAILS

A great deal of injury is done to the toes by improper trimming of the nails. Every person should possess a Pedicure Set, so as to be able properly to trim the nails. This consists of a pair of toe-nail nippers of the right size and style and a file and rasp.

The toe nail is there for the purpose of protecting the softer tissues at the end of the toe. It should, therefore, be left to grow even with the end of the toe, and then trimmed nearly straight across. One should not tear or cut the toe nail, nor trim too close into the nail grooves.

CROOKED OR RUN-DOWN HEELS

Many cases of crooked or run-down heels can be traced to weakness of the arch or ankle articulation,

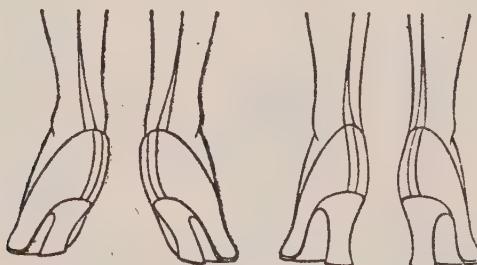


FIG. 76.—Showing crooked or run-over heels and condition corrected.

and in these cases an arch support should be fitted. There are, however, many instances where the person may habitually walk heavy at the outer edge of the heel, which can be quickly corrected by a wedge-shape pad or cushion placed inside of the shoe. Dr. Scholl's Walk-Strate Heel Pads will overcome the trouble and give relief from this very disagreeable condition.

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The object of this appliance is to reposition the weight-carrying points by distributing it evenly over the heel. Should the heels wear to the outside the thick part of the device should be placed on the outer side of the heel.

SHOES SLIPPING AT THE HEELS

The Practipedist and shoe-fitter will undoubtedly have many opportunities to correct this very annoying condition. Pumps, slippers and low-cut shoes in general



FIG. 77.—Showing Nu-Grip attached to low shoe. This device prevents shoe from slipping at the heel.

may be carefully fitted and yet have a tendency to slip at the heel, causing tenderness to the heel itself and producing considerable wear and friction on the hosiery of the wearer.

This can be quickly corrected by applying a pair of

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Dr. Scholl's Nu-Grip Heel Liners to the inner lining of the shoe. They are very quickly attached by slightly moistening the glued surface of the device and placing it in position, and pressing it firmly with the fingers until every part of the Nu-Grip has thoroughly adhered to the shoe lining. In applying the device it is very important that the shoe be dry and clean. It is advisable to allow the shoe to stand some time after applying, so that the glue will have time thoroughly to dry.

TENDER SPOTS ON THE FEET

Many times a shoe customer will complain of tender spots or irritations from wearing new or tight shoes. This is especially true among the women customers, due to the present type of ladies' footwear. Pumps, fancy cut-outs and straps often bind certain parts of the feet, causing ridges, pressure or irritation.

Prompt relief is given by applying Dr. Scholl's Zino Pads to the tender spot. By applying these pads at the point of pressure or friction relief is given to blisters and further annoyance is prevented.

GENERAL CARE OF THE FEET

The feet are a very important part of the human anatomy, and the most used and abused parts of the entire body. Much work and great strain are imposed upon them, and they should have care and attention.

Proper shoes and stockings are most important. Pointed-toe hose deforms the feet and restricts the natural action. Therefore a broad-toe or right-and-left stocking should always be worn.

Shoes should be of a shape that will permit every action and provide entire comfort. Shoes fitted too short or two narrow, or of the wrong style, will cause an actual deformity to be produced.

The feet should be bathed frequently and receive constant care. Being the farthest extremity from the heart, the circulation is naturally slower and somewhat



A. Zino pads, corn size, for corns and tender toes.



B. Zino pad, callous size, for callouses on ball.



C. Zino pads, callous size, for tender joint and callouses.



D. Bunion size for tender joints.



E. Zino pad, callous size, to relieve rubbing and tenderness at the heel.



F. Zino pad on instep to prevent pumps or new shoes blistering.

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lessened there. Therefore great care should be taken not to wear tight garters, or shoes too tightly laced, which will restrict the circulation.

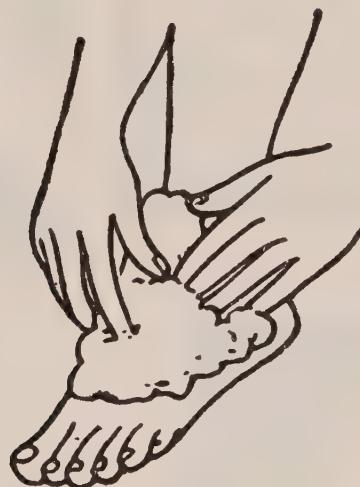


FIG. 78.—Showing the right manner in which the feet should be cared for. First by thoroughly washing and massaging with Pedico Foot Soap.

The feet come in contact with the dirt of the streets, the dust of the floors and carpets, and the little fine particles of dust work through the crevices of the shoes



FIG. 79.—Massaging the feet with Foot Cream. After the feet are thoroughly cleansed with Pedico Foot Soap the cream is applied and thoroughly massaged into the skin.

and into the pores of the skin. They are very apt to clog up these pores, which are more numerous in the feet than in any other part of the body, and this at

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once interferes with the natural skin action and local circulation.

For oxygenating the water Dr. Scholl's Ped-o-Kubes should be used. They are antiseptic and soften the water, thereby promoting lather. The effect is to stimulate the circulation and open up the pores of the skin.

Dr. Scholl's Pedico Granulated Foot Soap was compounded as a scientific cleanser and treatment for the feet. It is not only an antiseptic and deodorant, but by the process of the granulations induces an increased circulation. The soap thoroughly cleanses the pores and makes their action normal.



FIG. 80.—Antiseptic Foot Powder being applied to the foot. This should be shaken over the foot and into the stocking daily.

When the skin is dry, hard, cracking or of a scaly condition, Dr. Scholl's Foot Cream should be used and well massaged into the skin. This treatment should be followed daily, and before putting on the stockings Dr. Scholl's Foot Powder should be sprinkled over the foot and between the toes, to keep them soft and to absorb any moisture. Likewise a quantity should be sprinkled into the inside of the stocking.

If this treatment is resorted to, normal feet will be kept so and abnormal conditions made normal. Stockings should be changed every day.

FITTING OF SHOES

The very foundation and principles upon which the science of Practipedics is built depend upon the correct fitting of shoes and footwear in general. It would not be exaggerating to say that in 40 per cent. of the cases of foot troubles which the Practipedist is asked to relieve the predisposing cause will be found to be in the shoes and stockings.

Shoes that are fitted too short, too narrow, the wrong shape, the wrong style, all end up in some minor foot disorder. But unless this cause is quickly removed the damage is already done to the foot, foot weakness

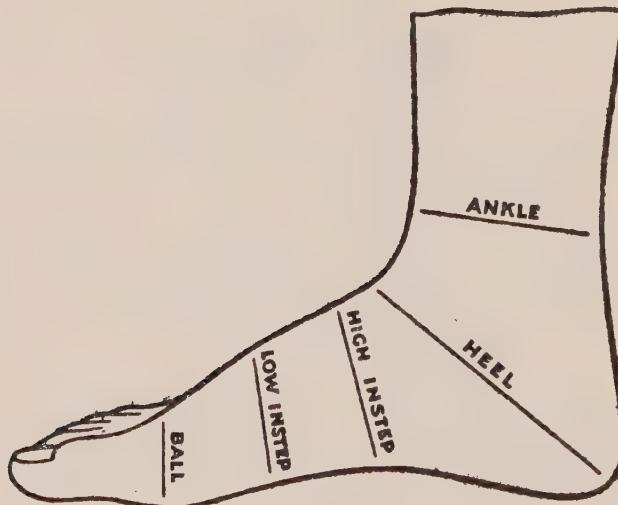


FIG. 81.—Showing standard positions of measurements. These same points of measuring are also used in measuring lasts.

develops, malformations take place and mechanical aid must then be resorted to to give relief.

With a fundamental knowledge of the anatomy of the foot such as you have mastered in the foregoing lessons you will be able to fit shoes more correctly, and where there is any serious or minor foot weakness you will be able to correct it immediately. Use your knowledge. You will soon acquire the knack of quickly sizing up the shape of the foot before you and

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know whether there is any abnormal condition that requires your scientific knowledge other than mere fitting.

There are several types of measure sticks and methods

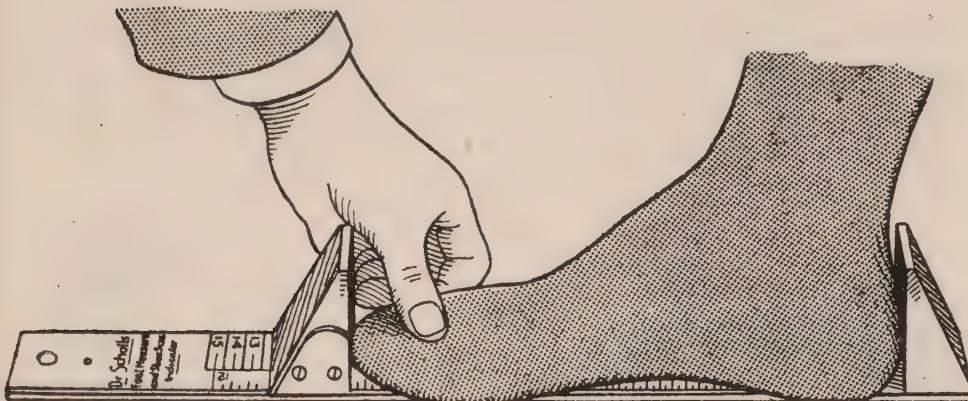


FIG. 82.—Dr. Scholl's Foot Measure and Shoe Size Indicator.

of measuring the feet. If you use a standard plain measure stick it is advisable to have the customer stand and make an allowance from two to three sizes in

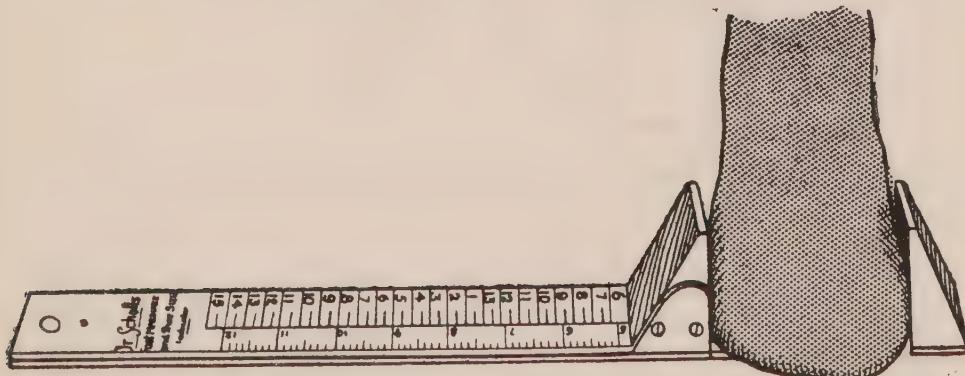


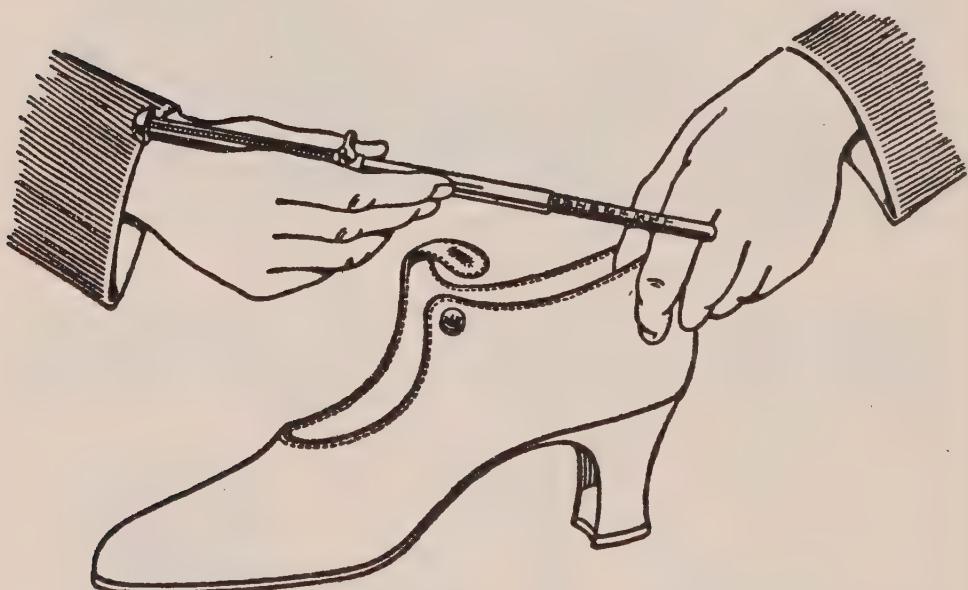
FIG. 83.—Dr. Scholl's Foot Measure and Shoe Size Indicator—measuring for width of shoe.

addition to what the stick calls for. This is absolutely necessary to give sufficient length to the shoe.

The authorized method, however, is using a special stick where an allowance has already been made for

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the expansion of the foot. This is known as Dr. Scholl's Foot Measure and Shoe Size Indicator. The scale is most carefully reckoned out according to the requirements of the foot, based on standard measurements of shoes, so that the figure on the scale at the end of the great toe indicates the correct length of shoe. Then by taking the width of the foot in the same manner and referring to the scale on the back of the Indicator you will be able to tell the correct width.



. 84.—Comparing standard size given by Size Detector or counter size made in shoe.

This method, of course, is a scientific and carefully studied out basis of measurements, but the student should understand that the type of foot is to be taken into consideration and slight variances may be in order.

Many times shoes do not come up to standard measurements, and occasionally manufacturers will change the shape of the last at the toe and in doing so the shoe is shortened from one-half to full size. Furthermore, occasionally a person will wear a shoe longer than is necessary, and, so that the Practipedist will be enabled to know exactly the size of the shoe

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the customer has been wearing, Dr. Scholl's Shoe Size Indicator has been prepared for this purpose. It is placed inside the shoe, the expansion spring is released so that the detector touches the extreme inside measurements of the shoe, viz. heel and toe. A thumb-screw is then tightened and the detector removed, which plainly shows the exact inside measurement of the shoe.

In measuring feet it is very important to observe the stretch or extension of the foot with the body's weight. If there is more than one-half size extension, then be careful of arch weakness.

In addition to fitting the foot properly and obtaining the foot length, remember that an appliance fitted must also be conducive to the customer's foot comfort and satisfactory shoe wear.

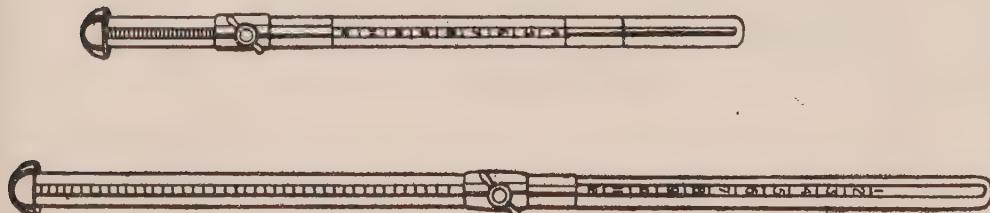


FIG. 85.—Dr. Scholl's Shoe Size Detector to measure exact shoe length.

Please note, in the illustrations, A, showing the foot without weight on; B, showing the same foot with weight on. Normal feet, of course, extend slightly, but usually less than one-half size. If the foot you are fitting extends more than this, look for arch weakness.

As to high heels, some medical practitioners used to recommend or even go so far as to prescribe flat-heeled shoes for all persons complaining of foot trouble. This practice, however, has been proven to be a fallacy and is discontinued by up-to-date Orthopedists and Practipedists. For the moment consider the development of the use of heels, beginning with a child. Its first pair of hard-soled shoes; the next with wedges—and finally come spring heels; then gradually, step by step,

an extra lift added. If a girl, she will soon wish to wear higher heels, and finally will be wearing heels from one and a half, one and three-quarters to two inches and possibly two and one-eighth inches in height. While this is being done Nature, in

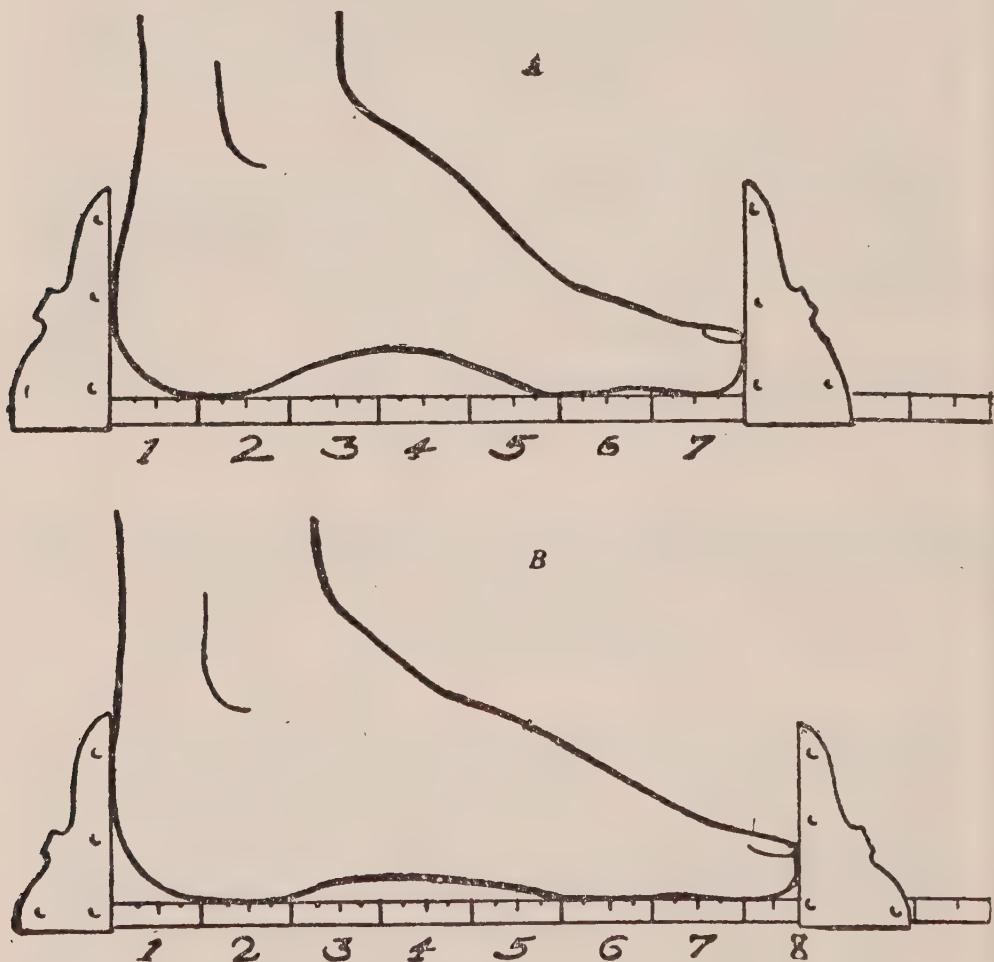


FIG. 86.—Showing stretching out or elongation of weak foot.
A shows foot without weight; B, weight on foot.

her gracious way, is foreshortening the big muscles of the calf and the Achilles tendon attached to the Os Calcis or heel bone, until finally the foot assumes in a relaxed condition the position of the high-heeled shoe.

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It is impossible, therefore, to expect a person to have comfort in a flat-heeled shoe after Nature has



FIG. 87.—Pedograph (print of sole of foot) being taken on Dr. Scholl's Pedograph Machine.

provided ample accommodations for the higher heel. If it is necessary to make a change back to lower heels do it gradually. So, to give comfort in shoes, select the

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shoe that is adapted to the customer's feet as nearly as possible in style and shape. In fitting, give ample room for the toes, width at the ball and a firm, snug fit through the heel and waist, using your judgment of the anatomical requirements laid before you in this course of Practipedics.

PEDOGRAPH IMPRESSIONS

For the Practipedist or shoe-fitter, Pedographs or sole impressions have a distinct value. Until the inven-



FIG. 88.—Pedographs of feet, showing three distinct conditions: A, normal arch; B, weakened arch; C, flat-foot.

tion and perfecting of Dr. Scholl's Pedograph Machine the methods of obtaining impressions of the feet were difficult and unsatisfactory. By this new device a clear impression can be made of the sole of the foot, which immediately portrays the structural condition of the foot, bearing points, any abnormal condition, such as weakened metatarsal arch, callouses, flat-foot, contracted toes, etc., and at the same time gives the correct length measurement of the foot to be used in fitting shoes.

The paper blanks on which the Pedographs are

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made are very useful in making an analysis of the foot condition and also in convincing the customer of the style of appliance and shoe required.



FIG. 89.—Pedograph being taken on Dr. Scholl's Pedograph Machine.

HOW TO IMPRESS A CUSTOMER

1. Making a good impression is an important part of the professional man's duties, and, whether you are in an office or in a shoe store, the result and effect are practically the same. As this elementary course is primarily written for the benefit of shoe-men, a few terse pointers will be given both as to salesmanship and the professional work. Personal appearance has much to do with impression: clean linen; clothes pressed; shoes polished; clean-shaven.

2. After the customer is seated and made comfortable and you are ready to give your attention, look over the shoes while you are removing them. You are able to diagnose and recognize numerous abnormal conditions of the feet by the way the shoe is worn.

3. As you unbutton or unlace the shoe you can easily observe whether the upper is spread out over the sole; if there is an enlarged toe joint at either the great or small toe; whether toes are cramped and drawn up, causing them to press against the upper leather, and if the leather is cracked or hardened from perspiration.

Likewise you will be able to discover if the instep

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is high, and whether there is any prominent projection over the instep caused by displacement of any of the bones of the transverse arch.

4. Great care should be exercised in removing the shoe. Give the impression at once that you are careful, conscientious and interested. Before placing it on the floor, turn it over and look at the sole and the heels.



FIG. 90.—Every customer's feet should be carefully examined for any abnormal condition. It will make shoe-fitting easier and enable the Practipedist to apply the correct appliance, and it also gives a good impression to the patient.

Notice how they are worn. See if the shoe has sufficient length and breadth. Notice if the shanks are broken down. Observe if there are thin spots or holes worn in the soles near the ball. Such a sign indicates that the weight is being thrown on the heads of the second and third metatarsals instead of being properly carried at the first and fifth.

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5. Place your hand in the shoe and run your fingers over the inner sole to ascertain if there are depressions, either at the ball, caused by the anterior metatarsal arch being depressed, or in the inner sole to the outside along the edge of the upper, which would indicate a weakness of the arch by allowing the foot to shift and slide forward.

6. You have now received a fair idea of the condition of the foot from the external signs of the shoe. Always remove both shoes. Before asking the customer to stand, take particular notice whether the stocking is of the pointed-toe variety, which, being too short, restricts the action of the toes. Then, holding the foot at the heel with the left hand, carefully go over the sole of the foot with the right hand to learn if there are any callosities at the ball of the foot or Anterior Metatarsal Arch.

7. If there are callosities, ask the questions, "Do these callouses cause you much pain or discomfort? Do your toes feel cramped? Do the soles of your feet burn?" Then, after you have discovered that the anterior metatarsal arch is weakened and that there is a displacement of one or more of the metatarsal heads, place pressure there, and point out to the client that your reason for asking the questions was because you noticed a weakened condition of the anterior arch.

8. Then observe the longitudinal arch. Also note carefully if the ankles tip in slightly when weight is placed on the foot. Also notice whether the posterior portion of the arch is lowered, this being easily recognized by the elongated appearance of the heel. You may then ask additional questions, such as:

"Do you ever notice a burning or cramping sensation on the ball of the foot or sole of the foot?"

"Do your toes feel cramped and feel that they require more space than is allowed by the shoe?"

"Do you notice that a new shoe loses its shape and looks shabby before it should?"

"Do you have pains in the heels?" (Press on the heel with your thumb or forefinger.)

"Do you tire easily after walking?"

"Do you have rheumatic-like pains in your feet or limbs?"

The customer will naturally be very much interested by the intelligent way you have conducted your inquiries, and will invariably answer: "Yes, I have noticed that my feet have been giving me considerable trouble, and that they burn on the soles and tire and ache after much standing, just as you mention."

9. You then may explain that she should have no more trouble with her feet than her hands. "If they were normal you would be able to walk, run or dance without bodily fatigue, tiring or aching of the feet or limbs. Your trouble seems to be a weakened condition of the foot." If it is a weak arch in the early stages you may say: "When the weight is taken off the foot assumes a perfectly natural shape; and you will notice you have naturally a high arch, but, owing to the weakened condition of the foot, when it bears the weight of the body it stretches out and flattens, so that after much standing or walking the ligaments and muscles become tired and relaxed and allow the foot to stretch to an unnatural extent."

10. To a client with a weakened-arch condition you may say: "I will fit you with a Dr. Scholl's Foot Support that can be worn in this shoe without being seen. This will not only give you immediate relief, with rest and comfort to your feet, but it will remove the cause of your trouble and bring comfort and relief in a remarkably short time."

11. Then, when you select the proper size Foot-Eazer, or other style of Dr. Scholl's Appliance indicated by your diagnosis, use arch fitter and mallet and do the fitting. Do not arch the appliance too high, especially when it is first placed into the shoe. Do not give it to the customer to look at, but place it immediately inside the shoe and have the customer stand.

12. Then suggest: "Doesn't that feel better to your foot?" "Don't you feel the bracing and restful support it gives, and don't you notice that it gives you more

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freedom to the toes?" "Doesn't it seem to brace you up all over?"

13. If the support is fitted too high and the customer complains of the pressure, always be quick and willing to make the adjustment, and place it back into the shoe and suggest that it is more comfortable.

14. Always button or lace up the shoe after the appliance is placed inside of it. It is well to explain that Dr. Scholl's appliances are all based on scientific principles, and your own knowledge of Practipedics enables you to give comfort by making the proper adjustments and using the appliances indicated in each and every case. You may point out, also, that no larger size shoe is needed, and that any stylish shoe can be worn with comfort. Try to impress upon the client that it is not necessary to wear large, unsightly footwear, because by your Practipedic method and Dr. Scholl's appliances you are able to remove the cause of the trouble, which will then permit the customer to wear almost any style of shoe.

15. The question may be asked (that is, if you are fitting an appliance like the Foot-Eazer, Tri-Spring, or Anterior Metatarsal Arch Support): "After I have once commenced the wearing of these appliances won't I always be compelled to wear them?" Your reply should be very decisive: "No. There is an abnormal condition present in your feet. The object of this appliance is to correct that abnormal condition and assist Nature to bring about normal functioning. It gives immediate relief, and by mechanical pressure corrects the abnormality, restores the depressed bones to their natural position, removes abnormal pressure and strain from the soft structures, such as the arteries and veins, and relieves the strain on the ligaments and muscles."

16. By correcting these displaced bones Nature responds by improving the circulation, which at once builds up the tissue and strengthens the parts of the foot, and by removing this abnormal strain Nature holds the bones up and stimulates muscular action so that in a short time permanent relief can be obtained.

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If the case is of long standing and in an aggravated state it is best not to promise more than relief and that the treatment will restore normal use to the feet, with a full degree of comfort.

17. In the early stages, however, thousands of cases are on record where the appliances can be laid aside after three to four months' wearing. Frequently less time than this is required.

If the question is asked: "Can I wear these appliances in any shoe?" you reply: "Yes, if the shoes are practically the same type; that is, if you wear about this same height heel, shape and size of shoe. I have adjusted these appliances to give you the necessary correction according to the poise of the foot in this style of shoe. If you change to a low-heel shoe it changes the poise of the foot, and naturally I must make a different adjustment to give you the same amount of corrective help."

18. "Now, if you have another style of shoe that you wish to wear, such as golf shoes or a high-heel dress shoe, then bring this shoe in to me, and I will adjust another pair of appliances to give you complete correction and comfort in that particular type of shoe."

19. In approaching a customer who has a bunion, explain that most cases of so-called bunions or Hallux Valgus are caused by undue pressure at the first metatarsal-phalangeal joint, or may be caused and accompanied by weakened arch and flat-foot. There are many cases of bunions that can be relieved by fitting the foot with a pair of Dr. Scholl's Foot-Easers, the object being to take the weight off the first metatarsal-phalangeal joint and distribute it evenly over the weight-carrying surface.

20. In examining a bunion joint, notice if the great toe is rigid or if you can straighten it without much force. Then use your treatment accordingly, and always use selling suggestions that will make the impression and satisfy the customer without a question of doubt that not only you, as a Practipedist, know your business

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thoroughly, but that the appliances which you have accepted as being the most scientific will give the comfort, relief and correction that are needed in each case.

21. If you fit a pair of Foot-Easers to relieve the pressure on the bunion joint and to equalize the body's weight, explain why and how this treatment will give relief.

22. If you fit a "Toe-Flex," explain how this exerts a gentle pressure in straightening the great toe, and if the joint is much enlarged and requires a bunion-reducer to remove the shoe pressure and relieve the local irritation, explain why it reduces the swelling and inflammation, and how, by stimulating local circulation, the accumulated tissue cells are carried away through the circulation.

23. On the subject of corns and callouses it is well to explain that they are caused by friction or intermittent pressure. If there is a depressed metatarsal head pushing down on the soft and thin tissue against the inner sole of the shoe, this pressure causes a callous. First, it sets up a slight local irritation and the skin becomes red and tender. Finally a callous forms on the outer layer of the skin. It is a result of Nature's attempt to protect the underlying tissues from injury. When these layers of dead skin or tissue pile up and become a hardened mass it causes pressure on the nerves in the under layer of skin, and this causes pain.

To use a knife and cut away this tissue is working against Nature unless the cause is removed. Try to explain and impress your customer with the number of steps taken each day, multiplying the body's weight by the number of steps taken, and you have the amount of strain and pressure the feet are compelled to endure each and every day.

24. Explain that the feet must have care, and as a part of your Practipedic Treatment always suggest Dr. Scholl's "3" Necessities. They at once increase the value of mechanical appliances and are the means of giving more comfort to the feet. This can be best brought to a customer's attention by bringing the

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treatment to him or her and saying, "Now, this is the home treatment for you to use, in addition to the appliances, to get the feet into a healthy condition. You will find full directions on each package." If necessary you can give a short explanation of how each of the items is to be used.

REVIEW QUESTIONS FOR LESSON No. 5

TO THE STUDENT

This is probably the most important lesson. It is also the last lesson, and when you have mastered the following review you will be able to notify the instructor of the International School of Practipedics, London, that you are prepared for your final examination. Then forms and instructions pertaining to the examination will be sent to you. To those who pass the examination a diploma will be awarded.

- (1) What is the first requisite in practipedic work?
- (2) What apparatus is most essential in making adjustments?
- (3) What are your aims in fitting foot appliances?
- (4) How would you determine the length?
- (5) What constitutes a good fitting arch support?
- (6) Why is it necessary to adjust differently for a high- and low-heeled shoe?
- (7) What would you do for slipping at the heel?
- (8) What is Hallux Valgus?
- (9) What would you do to remove the shoe pressure on a bunion?
- (10) What is the approved method of correcting a Hallux Valgus or bunion condition?
- (11) What would you do for a painful great toe?
- (12) Why do corns form?
- (13) How do you relieve painful corns?
- (14) Why are there callouses on the sole?
- (15) What is the treatment for chilblains?
- (16) What is the cause of ingrowing toe nails?
- (17) What is the proper care for the feet?
- (18) How do you measure feet for shoes?

THE GOODS YOU NEED IN PRACTIPEDIC WORK

WHAT THEY WILL DO

Dr. Scholl's Tru-Span Arch Support
For heavy-weight people and severe cases.

Dr. Scholl's Tri-Spring Arch Support
For flat-foot, broken arch and severe cases—heavy people.

Dr. Scholl's Foot-Eazer
For easing and restoring the feet to healthy condition.

Dr. Scholl's Anterior Metatarsal Arch Support No. 1
For weakened transverse arch, cramped toes and callouses.

Dr. Scholl's Anterior Metatarsal Arch Support No. 2
Same as No. 1, but without flange.

Dr. Scholl's Anterior Metatarsal Arch Support No. 3
For Metatarsalgia or Morton's Toe and longitudinal weakness.

Dr. Scholl's Anterior Metatarsal Arch Support No. 5
For Metatarsalgia or Morton's Toe.

Dr. Scholl's Toe Flex
For straightening crooked toes and bunions.

Dr. Scholl's Bunion Reducer
Takes off shoe pressure and reduces the enlargement.

Dr. Scholl's Bunion Spring
To act as a lever and correct bunions and Hallux Valgus.

Dr. Scholl's Reform Arch Support
Made with side slits and hand-drilled holes to prevent cracking.
Made in children's sizes.

Dr. Scholl's Uplift Arch Support
Light, easy support for mild cases of flat and weak foot.

Dr. Scholl's Absorbo Pads
For corns, tender joints and callouses. Made of rubber in all sizes.

Dr. Scholl's Fixo Corn Plaster
For hard corns, quick relief, sure removal.

Dr. Scholl's Walk-Strate Heel Pad
Prevents crooked, run-down heels.

Dr. Scholl's Nu-Grip
Prevents slipping or rubbing in the heel of pumps, low shoes and dancing-slippers.

Dr. Scholl's Heel-Tread Cushion
To act as a cushion or bed for the heel to rest upon.

Dr. Scholl's Pedico Foot Soap
Thoroughly cleans and removes dry skin and stimulates circulation.

Dr. Scholl's Foot Cream
For tender, burning, perspiring feet. Penetrating, cooling, soothing.

Dr. Scholl's Foot Powder
To be dusted over foot and in shoe. Cools and deodorizes.

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Dr. Scholl's Ligtone Lotion

For aches and pains caused by muscular and ligamentous strain.

Dr. Scholl's Corn Salve

For sore, inflamed, sensitive corns. Removes pressure and friction.

Dr. Scholl's Zino Pads

For callouses and tender spots.

Dr. Scholl's Hammer-Toe Spring

For straightening hammer toes and contracted toes.

Dr. Scholl's Arch Fitter and Hammer

For making individual adjustments of appliances to each case.

Dr. Scholl's Plaster Foot

Showing formation of bones with Foot-Eazer in position supporting arch.

Dr. Scholl's Anatomical Charts of Foot and Leg

1. On osteology. 2. Muscles, tendons and ligaments. 3. Veins, arteries and nerves.

Dr. Scholl's "z" Drop Corn Remedy

A liquid preparation, simple and effective in use.

Dr. Scholl's Wenal Ointment

A lubricating ointment for painful bunions.

Dr. Scholl's Callous Salve

For horny growth on sole of foot.

Dr. Scholl's Toe-Right

A scientific appliance for spreading toes.

Dr. Scholl's Ped-o-Kubes

A foot-bath tablet that purifies and oxygenates the water.

Dr. Scholl's Massage Cream

A stimulating antiseptic emollient

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A mild corrective appliance for arch weakness.

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For weak ankles, sprains and athletic purposes.

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For detecting and demonstrating foot disturbances.

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A great help to the shoe-man who wishes to educate himself.

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A book of practical use to shoe-men and students.

*All made under the patents and formulas of
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GRANVILLE SQUARE, LONDON, W.C. 1

TORONTO MELBOURNE CHICAGO NEW YORK



PRINTED IN GREAT BRITAIN
BY UNWIN BROTHERS, LIMITED
LONDON AND WOKING

